

# SEQUENCE LISTING

<110> Pharmacia Corporation

Bourner, Maureen J.

<120> DIFERENTIALLY EXPRESSED GENES INVOLVED IN CANCER, THE POLYPEPTIDES ENCODED THEREBY, AND METHODS OF USING THE SAME

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<150> 60/422,176

<151> 2002-10-29

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<170> PatentIn version 3.1

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<212> DNA

<213> homo sapiens

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<210> 36

<211> 1833

<212> DNA

<213> homo sapiens

<400> 36

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gccaaaggtg ctccgccgct aaggaacatg gcgaagggtg agcaggctct gagcctcgag	180
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tactgtgtga ggcccaacag cggaatcatc gatgcagggg cctcaattaa tgtatctgga	360
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attggattgg tggatccacc atatcatggg atttaaattt atcataacca tgtgtaaaaa	600

gaaattaatg tatgatgaca tctcacaggt cttgccttta aattaccctt ccctgcacac	660
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<210> 37

<211> 3213

<212> DNA

<213> homo sapiens

<400> 37

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tcagcacttg taagaactgg tataaaaagt ccatctgtgg acagaaaacg actgttttat	240
atgaatgttg ccttggttat atgagaatgg aaggaatgaa aggctgccca gcagttttgc	300
ccattgacca tgtttatggc actctgggca tcgtgggagc caccacaacg cagcgtatt	360
ctgacgcctc aaaactgagg gaggagatcg agggaaaggg atccttcact tactttgcac	420
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tgaatgttga attactgaat gctttacata gtcacatgat taataagaga atgttgacca	540
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accattatcc taatgggggt gtcactgtta attgtgctcg aatcatccat gggaaccaga	660
ttgcaacaaa tgggtgttgc catgtcattg accgtgtgct tacacaaatt ggtacctcaa	720
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cggacatatt ggaggccctt ggaagagacg gtcacttcac actctttgct cccaccaatg	840
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<210> 38

<211> 1412

<212> DNA

<213> homo sapiens

<400> 38

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tcccgatct	ccgtgtccc	ctccaccagc	ttcagggg	gcagggggtc	cgggggcctg	240



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gcgaataaaa agttcagagt tcattggatg tc 1412

<210> 39

<211> 829

<212> PRT

<213> homo sapiens

<400> 39

Met Gly Leu Pro Arg Gly Pro Leu Ala Ser Leu Leu Leu Leu Gln Val  
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Cys Trp Leu Gln Cys Ala Ala Ser Glu Pro Cys Arg Ala Val Phe Arg  
20 25 30

Glu Ala Glu Val Thr Leu Glu Ala Gly Gly Ala Glu Gln Glu Pro Gly  
35 40 45

Gln Ala Leu Gly Lys Val Phe Met Gly Cys Pro Gly Gln Glu Pro Ala  
50 55 60

Leu Phe Ser Thr Asp Asn Asp Asp Phe Thr Val Arg Asn Gly Glu Thr  
65 70 75 80

Val Gln Glu Arg Arg Ser Leu Lys Glu Arg Asn Pro Leu Lys Ile Phe  
85 90 95

Pro Ser Lys Arg Ile Leu Arg Arg His Lys Arg Asp Trp Val Val Ala  
100 105 110

Pro Ile Ser Val Pro Glu Asn Gly Lys Gly Pro Phe Pro Gln Arg Leu  
115 120 125

Asn Gln Leu Lys Ser Asn Lys Asp Arg Asp Thr Lys Ile Phe Tyr Ser  
130 135 140

Ile Thr Gly Pro Gly Ala Asp Ser Pro Pro Glu Gly Val Phe Ala Val  
145 150 155 160

Glu Lys Glu Thr Gly Trp Leu Leu Leu Asn Lys Pro Leu Asp Arg Glu  
165 170 175

Glu Ile Ala Lys Tyr Glu Leu Phe Gly His Ala Val Ser Glu Asn Gly  
180 185 190

Ala Ser Val Glu Asp Pro Met Asn Ile Ser Ile Ile Val Thr Asp Gln  
195 200 205

Asn Asp His Lys Pro Lys Phe Thr Gln Asp Thr Phe Arg Gly Ser Val  
210 215 220

Leu Glu Gly Val Leu Pro Gly Thr Ser Val Met Gln Val Thr Ala Thr  
225 230 235 240

Asp Glu Asp Asp Ala Ile Tyr Thr Tyr Asn Gly Val Val Ala Tyr Ser  
245 250 255

Ile His Ser Gln Glu Pro Lys Asp Pro His Asp Leu Met Phe Thr Ile  
260 265 270

His Arg Ser Thr Gly Thr Ile Ser Val Ile Ser Ser Gly Leu Asp Arg

275

280

285

Glu Lys Val Pro Glu Tyr Thr Leu Thr Ile Gln Ala Thr Asp Met Asp  
 290 295 300

Gly Asp Gly Ser Thr Thr Thr Ala Val Ala Val Val Glu Ile Leu Asp  
 305 310 315 320

Ala Asn Asp Asn Ala Pro Met Phe Asp Pro Gln Lys Tyr Glu Ala His  
 325 330 335

Val Pro Glu Asn Ala Val Gly His Glu Val Gln Arg Leu Thr Val Thr  
 340 345 350

Asp Leu Asp Ala Pro Asn Ser Pro Ala Trp Arg Ala Thr Tyr Leu Ile  
 355 360 365

Met Gly Gly Asp Asp Gly Asp His Phe Thr Ile Thr Thr His Pro Glu  
 370 375 380

Ser Asn Gln Gly Ile Leu Thr Thr Arg Lys Gly Leu Asp Phe Glu Ala  
 385 390 395 400

Lys Asn Gln His Thr Leu Tyr Val Glu Val Thr Asn Glu Ala Pro Phe  
 405 410 415

Val Leu Lys Leu Pro Thr Ser Thr Ala Thr Ile Val Val His Val Glu  
 420 425 430

Asp Val Asn Glu Ala Pro Val Phe Val Pro Pro Ser Lys Val Val Glu  
 435 440 445

Val Gln Glu Gly Ile Pro Thr Gly Glu Pro Val Cys Val Tyr Thr Ala  
 450 455 460

Glu Asp Pro Asp Lys Glu Asn Gln Lys Ile Ser Tyr Arg Ile Leu Arg  
 465 470 475 480

Asp Pro Ala Gly Trp Leu Ala Met Asp Pro Asp Ser Gly Gln Val Thr  
 485 490 495

Ala Val Gly Thr Leu Asp Arg Glu Asp Glu Gln Phe Val Arg Asn Asn  
 500 505 510

Ile Tyr Glu Val Met Val Leu Ala Met Asp Asn Gly Ser Pro Pro Thr  
 515 520 525

Thr Gly Thr Gly Thr Leu Leu Leu Thr Leu Ile Asp Val Asn Asp His  
 530 535 540

Gly Pro Val Pro Glu Pro Arg Gln Ile Thr Ile Cys Asn Gln Ser Pro  
 545 550 555 560

Val Arg His Val Leu Asn Ile Thr Asp Lys Asp Leu Ser Pro His Thr  
 565 570 575

Ser Pro Phe Gln Ala Gln Leu Thr Asp Asp Ser Asp Ile Tyr Trp Thr  
 580 585 590

Ala Glu Val Asn Glu Glu Gly Asp Thr Val Val Leu Ser Leu Lys Lys  
 595 600 605

Phe Leu Lys Gln Asp Thr Tyr Asp Val His Leu Ser Leu Ser Asp His  
 610 615 620

Gly Asn Lys Glu Gln Leu Thr Val Ile Arg Ala Thr Val Cys Asp Cys  
 625 630 635 640

His Gly His Val Glu Thr Cys Pro Gly Pro Trp Lys Gly Gly Phe Ile  
 645 650 655

Leu Pro Val Leu Gly Ala Val Leu Ala Leu Leu Phe Leu Leu Val  
 660 665 670

Leu Leu Leu Leu Val Arg Lys Lys Arg Lys Ile Lys Glu Pro Leu Leu  
 675 680 685

Leu Pro Glu Asp Asp Thr Arg Asp Asn Val Phe Tyr Tyr Gly Glu Glu  
 690 695 700

Gly Gly Gly Glu Glu Asp Gln Asp Tyr Asp Ile Thr Gln Leu His Arg  
 705 710 715 720

Gly Leu Glu Ala Arg Pro Glu Val Val Leu Arg Asn Asp Val Ala Pro  
 725 730 735

Thr Ile Ile Pro Thr Pro Met Tyr Arg Pro Arg Pro Ala Asn Pro Asp  
 740 745 750

Glu Ile Gly Asn Phe Ile Ile Glu Asn Leu Lys Ala Ala Asn Thr Asp  
 755 760 765

Pro Thr Ala Pro Pro Tyr Asp Thr Leu Leu Val Phe Asp Tyr Glu Gly  
 770 775 780

Ser Gly Ser Asp Ala Ala Ser Leu Ser Ser Leu Thr Ser Ser Ala Ser  
 785 790 795 800

Asp Gln Asp Gln Asp Tyr Asp Tyr Leu Asn Glu Trp Gly Ser Arg Phe  
 805 810 815

Lys Lys Leu Ala Asp Met Tyr Gly Gly Gly Glu Asp Asp  
 820 825

<210> 40

<211> 1400

<212> PRT

<213> homo sapiens

<400> 40

Met Glu Leu Leu Pro Pro Leu Pro Gln Ser Phe Leu Leu Leu Leu Leu  
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Leu Pro Ala Lys Pro Ala Ala Gly Glu Asp Trp Gln Cys Pro Arg Thr  
 20 25 30

Pro Tyr Ala Ala Ser Arg Asp Phe Asp Val Lys Tyr Val Val Pro Ser  
 35 40 45

Phe Ser Ala Gly Gly Leu Val Gln Ala Met Val Thr Tyr Glu Gly Asp  
 50 55 60

Arg Asn Glu Ser Ala Val Phe Val Ala Ile Arg Asn Arg Leu His Val  
 65 70 75 80

Leu Gly Pro Asp Leu Lys Ser Val Gln Ser Leu Ala Thr Gly Pro Ala  
 85 90 95

Gly Asp Pro Gly Cys Gln Thr Cys Ala Ala Cys Gly Pro Gly Pro His  
 100 105 110

Gly Pro Pro Gly Asp Thr Asp Thr Lys Val Leu Val Leu Asp Pro Ala  
 115 120 125

Leu Pro Ala Leu Val Ser Cys Gly Ser Ser Leu Gln Gly Arg Cys Phe  
130 135 140

Leu His Asp Leu Glu Pro Gln Gly Thr Ala Val His Leu Ala Ala Pro  
145 150 155 160

Ala Cys Leu Phe Ser Ala His His Asn Arg Pro Asp Asp Cys Pro Asp  
165 170 175

Cys Val Ala Ser Pro Leu Gly Thr Arg Val Thr Val Val Glu Gln Gly  
180 185 190

Gln Ala Ser Tyr Phe Tyr Val Ala Ser Ser Leu Asp Ala Ala Val Ala  
195 200 205

Gly Ser Phe Ser Pro Arg Ser Val Ser Ile Arg Arg Leu Lys Ala Asp  
210 215 220

Ala Ser Gly Phe Ala Pro Gly Phe Val Ala Leu Ser Val Leu Pro Lys  
225 230 235 240

His Leu Val Ser Tyr Ser Ile Glu Tyr Val His Ser Phe His Thr Gly  
245 250 255

Ala Phe Val Tyr Phe Leu Thr Val Gln Pro Ala Ser Val Thr Asp, Asp  
260 265 270

Pro Ser Ala Leu His Thr Arg Leu Ala Arg Leu Ser Ala Thr Glu Pro  
275 280 285

Glu Leu Gly Asp Tyr Arg Glu Leu Val Leu Asp Cys Arg Phe Ala Pro  
290 295 300

Lys Arg Arg Arg Arg Gly Ala Pro Glu Gly Gly Gln Pro Tyr Pro Val  
305 310 315 320

Leu Gln Val Ala His Ser Ala Pro Val Gly Ala Gln Leu Ala Thr Glu  
325 330 335

Leu Ser Ile Ala Glu Gly Gln Glu Val Leu Phe Gly Val Phe Val Thr  
340 345 350

Gly Lys Asp Gly Gly Pro Gly Val Gly Pro Asn Ser Val Val Cys Ala  
355 360 365

Phe Pro Ile Asp Leu Leu Asp Thr Leu Ile Asp Glu Gly Val Glu Arg

370

375

380

Cys Cys Glu Ser Pro Val His Pro Gly Leu Arg Arg Gly Leu Asp Phe  
 385 390 395 400

Phe Gln Ser Pro Ser Phe Cys Pro Asn Pro Pro Gly Leu Glu Ala Leu  
 405 410 415

Ser Pro Asn Thr Ser Cys Arg His Phe Pro Leu Leu Val Ser Ser Ser  
 420 425 430

Phe Ser Arg Val Asp Leu Phe Asn Gly Leu Leu Gly Pro Val Gln Val  
 435 440 445

Thr Ala Leu Tyr Val Thr Arg Leu Asp Asn Val Thr Val Ala His Met  
 450 455 460

Gly Thr Met Asp Gly Arg Ile Leu Gln Val Glu Leu Val Arg Ser Leu  
 465 470 475 480

Asn Tyr Leu Leu Tyr Val Ser Asn Phe Ser Leu Gly Asp Ser Gly Gln  
 485 490 495

Pro Val Gln Arg Asp Val Ser Arg Leu Gly Asp His Leu Leu Phe Ala  
 500 505 510

Ser Gly Asp Gln Val Phe Gln Val Pro Ile Arg Gly Pro Gly Cys Arg  
 515 520 525

His Phe Leu Thr Cys Gly Arg Cys Leu Arg Ala Trp His Phe Met Gly  
 530 535 540

Cys Gly Trp Cys Gly Asn Met Cys Gly Gln Gln Lys Glu Cys Pro Gly  
 545 550 555 560

Ser Trp Gln Gln Asp His Cys Pro Pro Lys Leu Thr Glu Phe His Pro  
 565 570 575

His Ser Gly Pro Leu Arg Gly Ser Thr Arg Leu Thr Leu Cys Gly Ser  
 580 585 590

Asn Phe Tyr Leu His Pro Ser Gly Leu Val Pro Glu Gly Thr His Gln  
 595 600 605

Val Thr Val Gly Gln Ser Pro Cys Arg Pro Leu Pro Lys Asp Ser Ser  
 610 615 620

Lys Leu Arg Pro Val Pro Arg Lys Asp Phe Val Glu Glu Phe Glu Cys  
625 630 635 640

Glu Leu Glu Pro Leu Gly Thr Gln Ala Val Gly Pro Thr Asn Val Ser  
645 650 655

Leu Thr Val Thr Asn Met Pro Pro Gly Lys His Phe Arg Val Asp Gly  
660 665 670

Thr Ser Val Leu Arg Gly Phe Ser Phe Met Glu Pro Val Leu Ile Ala  
675 680 685

Val Gln Pro Leu Phe Gly Pro Arg Ala Gly Gly Thr Cys Leu Thr Leu  
690 695 700

Glu Gly Gln Ser Leu Ser Val Gly Thr Ser Arg Ala Val Leu Val Asn  
705 710 715 720

Gly Thr Glu Cys Leu Leu Ala Arg Val Ser Glu Gly Gln Leu Leu Cys  
725 730 735

Ala Thr Pro Pro Gly Ala Thr Val Ala Ser Val Pro Leu Ser Leu Gln  
740 745 750

Val Gly Gly Ala Gln Val Pro Gly Ser Trp Thr Phe Gln Tyr Arg Glu  
755 760 765

Asp Pro Val Val Leu Ser Ile Ser Pro Asn Cys Gly Tyr Ile Asn Ser  
770 775 780

His Ile Thr Ile Cys Gly Gln His Leu Thr Ser Ala Trp His Leu Val  
785 790 795 800

Leu Ser Phe His Asp Gly Leu Arg Ala Val Glu Ser Arg Cys Glu Arg  
805 810 815

Gln Leu Pro Glu Gln Gln Leu Cys Arg Leu Pro Glu Tyr Val Val Arg  
820 825 830

Asp Pro Gln Gly Trp Val Ala Gly Asn Leu Ser Ala Arg Gly Asp Gly  
835 840 845

Ala Ala Gly Phe Thr Leu Pro Gly Phe Arg Phe Leu Pro Pro Pro His  
850 855 860



Pro Pro Ser Ala Asn Leu Val Pro Leu Lys Pro Glu Glu His Ala Ile  
865 870 875 880

Lys Phe Glu Tyr Ile Gly Leu Gly Ala Val Ala Asp Cys Val Gly Ile  
885 890 895

Asn Val Thr Val Gly Gly Glu Ser Cys Gln His Glu Phe Arg Gly Asp  
900 905 910

Met Val Val Cys Pro Leu Pro Pro Ser Leu Gln Leu Gly Gln Asp Gly  
915 920 925

Ala Pro Leu Gln Val Cys Val Asp Gly Glu Cys His Ile Leu Gly Arg  
930 935 940

Val Val Arg Pro Gly Pro Asp Gly Val Pro Gln Ser Thr Leu Leu Gly  
945 950 955 960

Ile Leu Leu Pro Leu Leu Leu Leu Val Ala Ala Leu Ala Thr Ala Leu  
965 970 975

Val Phe Ser Tyr Trp Trp Arg Arg Lys Gln Leu Val Leu Pro Pro Asn  
980 985 990

Leu Asn Asp Leu Ala Ser Leu Asp Gln Thr Ala Gly Ala Thr Pro Leu  
995 1000 1005

Pro Ile Leu Tyr Ser Gly Ser Asp Tyr Arg Ser Gly Leu Ala Leu  
1010 1015 1020

Pro Ala Ile Asp Gly Leu Asp Ser Thr Thr Cys Val His Gly Ala  
1025 1030 1035

Ser Phe Ser Asp Ser Glu Asp Glu Ser Cys Val Pro Leu Leu Arg  
1040 1045 1050

Lys Glu Ser Ile Gln Leu Arg Asp Leu Asp Ser Ala Leu Leu Ala  
1055 1060 1065

Glu Val Lys Asp Val Leu Ile Pro His Glu Arg Val Val Thr His  
1070 1075 1080

Ser Asp Arg Val Ile Gly Lys Gly His Phe Gly Val Val Tyr His  
1085 1090 1095

Gly	Glu	Tyr	Ile	Asp	Gln	Ala	Gln	Asn	Arg	Ile	Gln	Cys	Ala	Ile
1100						1105					1110			
Lys	Ser	Leu	Ser	Arg	Ile	Thr	Glu	Met	Gln	Gln	Val	Glu	Ala	Phe
1115						1120					1125			
Leu	Arg	Glu	Gly	Leu	Leu	Met	Arg	Gly	Leu	Asn	His	Pro	Asn	Val
1130						1135					1140			
Leu	Ala	Leu	Ile	Gly	Ile	Met	Leu	Pro	Pro	Glu	Gly	Leu	Pro	His
1145						1150					1155			
Val	Leu	Leu	Pro	Tyr	Met	Cys	His	Gly	Asp	Leu	Leu	Gln	Phe	Ile
1160						1165					1170			
Arg	Ser	Pro	Gln	Arg	Asn	Pro	Thr	Val	Lys	Asp	Leu	Ile	Ser	Phe
1175						1180					1185			
Gly	Leu	Gln	Val	Ala	Arg	Gly	Met	Glu	Tyr	Leu	Ala	Glu	Gln	Lys
1190						1195					1200			
Phe	Val	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Cys	Met	Leu	Asp	Glu
1205						1210					1215			
Ser	Phe	Thr	Val	Lys	Val	Ala	Asp	Phe	Gly	Leu	Ala	Arg	Asp	Ile
1220						1225					1230			
Leu	Asp	Arg	Glu	Tyr	Tyr	Ser	Val	Gln	Gln	His	Arg	His	Ala	Arg
1235						1240					1245			
Leu	Pro	Val	Lys	Trp	Met	Ala	Leu	Glu	Ser	Leu	Gln	Thr	Tyr	Arg
1250						1255					1260			
Phe	Thr	Thr	Lys	Ser	Asp	Val	Trp	Ser	Phe	Gly	Val	Leu	Leu	Trp
1265						1270					1275			
Glu	Leu	Leu	Thr	Arg	Gly	Ala	Pro	Pro	Tyr	Arg	His	Ile	Asp	Pro
1280						1285					1290			
Phe	Asp	Leu	Thr	His	Phe	Leu	Ala	Gln	Gly	Arg	Arg	Leu	Pro	Gln
1295						1300					1305			
Pro	Glu	Tyr	Cys	Pro	Asp	Ser	Leu	Tyr	Gln	Val	Met	Gln	Gln	Cys
1310						1315					1320			
Trp	Glu	Ala	Asp	Pro	Ala	Val	Arg	Pro	Thr	Phe	Arg	Val	Leu	Val

1325                      1330                      1335  
 Gly Glu Val Glu Gln Ile Val Ser Ala Leu Leu Gly Asp His Tyr  
 1340                      1345                      1350  
 Val Gln Leu Pro Ala Thr Tyr Met Asn Leu Gly Pro Ser Thr Ser  
 1355                      1360                      1365  
 His Glu Met Asn Val Arg Pro Glu Gln Pro Gln Phe Ser Pro Met  
 1370                      1375                      1380  
 Pro Gly Asn Val Arg Arg Pro Arg Pro Leu Ser Glu Pro Pro Arg  
 1385                      1390                      1395  
 Pro Thr  
 1400  
 <210> 41  
 <211> 693  
 <212> PRT  
 <213> homo sapiens  
 <400> 41  
 Met Thr Pro Gln Ser Leu Leu Gln Thr Thr Leu Phe Leu Leu Ser Leu  
 1                      5                      10                      15  
 Leu Phe Leu Val Gln Gly Ala His Gly Arg Gly His Arg Glu Asp Phe  
 20                      25                      30  
 Arg Phe Cys Ser Gln Arg Asn Gln Thr His Arg Ser Ser Leu His Tyr  
 35                      40                      45  
 Lys Pro Thr Pro Asp Leu Arg Ile Ser Ile Glu Asn Ser Glu Glu Ala  
 50                      55                      60  
 Leu Thr Val His Ala Pro Phe Pro Ala Ala His Pro Ala Ser Arg Ser  
 65                      70                      75                      80  
 Phe Pro Asp Pro Arg Gly Leu Tyr His Phe Cys Leu Tyr Trp Asn Arg  
 85                      90                      95  
 His Ala Gly Arg Leu His Leu Leu Tyr Gly Lys Arg Asp Phe Leu Leu  
 100                      105                      110

Ser Asp Lys Ala Ser Ser Leu Leu Cys Phe Gln His Gln Glu Glu Ser  
 115 120 125

Leu Ala Gln Gly Pro Pro Leu Leu Ala Thr Ser Val Thr Ser Trp Trp  
 130 135 140

Ser Pro Gln Asn Ile Ser Leu Pro Ser Ala Ala Ser Phe Thr Phe Ser  
 145 150 155 160

Phe His Ser Pro Pro His Thr Ala Ala His Asn Ala Ser Val Asp Met  
 165 170 175

Cys Glu Leu Lys Arg Asp Leu Gln Leu Leu Ser Gln Phe Leu Lys His  
 180 185 190

Pro Gln Lys Ala Ser Arg Arg Pro Ser Ala Ala Pro Ala Ser Gln Gln  
 195 200 205

Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val Arg Phe Met Gly Asp  
 210 215 220

Met Val Ser Phe Glu Glu Asp Arg Ile Asn Ala Thr Val Trp Lys Leu  
 225 230 235 240

Gln Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Glu  
 245 250 255

Glu Glu Gln Ser Glu Ile Met Glu Tyr Ser Val Leu Leu Pro Arg Thr  
 260 265 270

Leu Phe Gln Arg Thr Lys Gly Arg Ser Gly Glu Ala Glu Lys Arg Leu  
 275 280 285

Leu Leu Val Asp Phe Ser Ser Gln Ala Leu Phe Gln Asp Lys Asn Ser  
 290 295 300

Ser Gln Val Leu Gly Glu Lys Val Leu Gly Ile Val Val Gln Asn Thr  
 305 310 315 320

Lys Val Ala Asn Leu Thr Glu Pro Val Val Leu Thr Phe Gln His Gln  
 325 330 335

Leu Gln Pro Lys Asn Val Thr Leu Gln Cys Val Phe Trp Val Glu Asp  
 340 345 350

Pro Thr Leu Ser Ser Pro Gly His Trp Ser Ser Ala Gly Cys Glu Thr  
 355 360 365

Val Arg Arg Glu Thr Gln Thr Ser Cys Phe Cys Asn His Leu Thr Tyr  
 370 375 380

Phe Ala Val Leu Met Val Ser Ser Val Glu Val Asp Ala Val His Lys  
 385 390 395 400

His Tyr Leu Ser Leu Leu Ser Tyr Val Gly Cys Val Val Ser Ala Leu  
 405 410 415

Ala Cys Leu Val Thr Ile Ala Ala Tyr Leu Cys Ser Arg Val Pro Leu  
 420 425 430

Pro Cys Arg Arg Lys Pro Arg Asp Tyr Thr Ile Lys Val His Met Asn  
 435 440 445

Leu Leu Leu Ala Val Phe Leu Leu Asp Thr Ser Phe Leu Leu Ser Glu  
 450 455 460

Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Ile  
 465 470 475 480

Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu  
 485 490 495

Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val  
 500 505 510

Pro Gly Tyr Leu Leu Lys Leu Ser Ala Met Gly Trp Gly Phe Pro Ile  
 515 520 525

Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro  
 530 535 540

Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly Val Ile Tyr Pro Ser  
 545 550 555 560

Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr Ile Thr Asn Leu Gly  
 565 570 575

Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala Met Leu Ala Thr Met  
 580 585 590

Val Val Gln Ile Leu Arg Leu Arg Pro His Thr Gln Lys Trp Ser His  
595 600 605

Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala  
610 615 620

Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val Val Leu  
625 630 635 640

Tyr Leu Phe Ser Ile Ile Thr Ser Phe Gln Gly Phe Leu Ile Phe Ile  
645 650 655

Trp Tyr Trp Ser Met Arg Leu Gln Ala Arg Gly Gly Pro Ser Pro Leu  
660 665 670

Lys Ser Asn Ser Asp Cys Ala Arg Leu Pro Ile Ser Ser Gly Ser Thr  
675 680 685

Ser Ser Ser Arg Ile  
690

<210> 42

<211> 806

<212> PRT

<213> homo sapiens

<400> 42

Met Gly Ala Pro Ala Cys Ala Leu Ala Leu Cys Val Ala Val Ala Ile  
1 5 10 15

Val Ala Gly Ala Ser Ser Glu Ser Leu Gly Thr Glu Gln Arg Val Val  
20 25 30

Gly Arg Ala Ala Glu Val Pro Gly Pro Glu Pro Gly Gln Gln Glu Gln  
35 40 45

Leu Val Phe Gly Ser Gly Asp Ala Val Glu Leu Ser Cys Pro Pro Pro  
50 55 60

Gly Gly Gly Pro Met Gly Pro Thr Val Trp Val Lys Asp Gly Thr Gly  
65 70 75 80

Leu Val Pro Ser Glu Arg Val Leu Val Gly Pro Gln Arg Leu Gln Val

Leu Asn Ala Ser His Glu Asp Ser Gly Ala Tyr Ser Cys Arg Gln Arg  
 100 105 110

Leu Thr Gln Arg Val Leu Cys His Phe Ser Val Arg Val Thr Asp Ala  
 115 120 125

Pro Ser Ser Gly Asp Asp Glu Asp Gly Glu Asp Glu Ala Glu Asp Thr  
 130 135 140

Gly Val Asp Thr Gly Ala Pro Tyr Trp Thr Arg Pro Glu Arg Met Asp  
 145 150 155 160

Lys Lys Leu Leu Ala Val Pro Ala Ala Asn Thr Val Arg Phe Arg Cys  
 165 170 175

Pro Ala Ala Gly Asn Pro Thr Pro Ser Ile Ser Trp Leu Lys Asn Gly  
 180 185 190

Arg Glu Phe Arg Gly Glu His Arg Ile Gly Gly Ile Lys Leu Arg His  
 195 200 205

Gln Gln Trp Ser Leu Val Met Glu Ser Val Val Pro Ser Asp Arg Gly  
 210 215 220

Asn Tyr Thr Cys Val Val Glu Asn Lys Phe Gly Ser Ile Arg Gln Thr  
 225 230 235 240

Tyr Thr Leu Asp Val Leu Glu Arg Ser Pro His Arg Pro Ile Leu Gln  
 245 250 255

Ala Gly Leu Pro Ala Asn Gln Thr Ala Val Leu Gly Ser Asp Val Glu  
 260 265 270

Phe His Cys Lys Val Tyr Ser Asp Ala Gln Pro His Ile Gln Trp Leu  
 275 280 285

Lys His Val Glu Val Asn Gly Ser Lys Val Gly Pro Asp Gly Thr Pro  
 290 295 300

Tyr Val Thr Val Leu Lys Thr Ala Gly Ala Asn Thr Thr Asp Lys Glu  
 305 310 315 320

Leu Glu Val Leu Ser Leu His Asn Val Thr Phe Glu Asp Ala Gly Glu  
 325 330 335

Tyr Thr Cys Leu Ala Gly Asn Ser Ile Gly Phe Ser His His Ser Ala  
 340 345 350

Trp Leu Val Val Leu Pro Ala Glu Glu Glu Leu Val Glu Ala Asp Glu  
 355 360 365

Ala Gly Ser Val Tyr Ala Gly Ile Leu Ser Tyr Gly Val Gly Phe Phe  
 370 375 380

Leu Phe Ile Leu Val Val Ala Ala Val Thr Leu Cys Arg Leu Arg Ser  
 385 390 395 400

Pro Pro Lys Lys Gly Leu Gly Ser Pro Thr Val His Lys Ile Ser Arg  
 405 410 415

Phe Pro Leu Lys Arg Gln Val Ser Leu Glu Ser Asn Ala Ser Met Ser  
 420 425 430

Ser Asn Thr Pro Leu Val Arg Ile Ala Arg Leu Ser Ser Gly Glu Gly  
 435 440 445

Pro Thr Leu Ala Asn Val Ser Glu Leu Glu Leu Pro Ala Asp Pro Lys  
 450 455 460

Trp Glu Leu Ser Arg Ala Arg Leu Thr Leu Gly Lys Pro Leu Gly Glu  
 465 470 475 480

Gly Cys Phe Gly Gln Val Val Met Ala Glu Ala Ile Gly Ile Asp Lys  
 485 490 495

Asp Arg Ala Ala Lys Pro Val Thr Val Ala Val Lys Met Leu Lys Asp  
 500 505 510

Asp Ala Thr Asp Lys Asp Leu Ser Asp Leu Val Ser Glu Met Glu Met  
 515 520 525

Met Lys Met Ile Gly Lys His Lys Asn Ile Ile Asn Leu Leu Gly Ala  
 530 535 540

Cys Thr Gln Gly Gly Pro Leu Tyr Val Leu Val Glu Tyr Ala Ala Lys  
 545 550 555 560

Gly Asn Leu Arg Glu Phe Leu Arg Ala Arg Arg Pro Pro Gly Leu Asp  
 565 570 575



Tyr Ser Phe Asp Thr Cys Lys Pro Pro Glu Glu Gln Leu Thr Phe Lys  
580 585 590

Asp Leu Val Ser Cys Ala Tyr Gln Val Ala Arg Gly Met Glu Tyr Leu  
595 600 605

Ala Ser Gln Lys Cys Ile His Arg Asp Leu Ala Ala Arg Asn Val Leu  
610 615 620

Val Thr Glu Asp Asn Val Met Lys Ile Ala Asp Phe Gly Leu Ala Arg  
625 630 635 640

Asp Val His Asn Leu Asp Tyr Tyr Lys Lys Thr Thr Asn Gly Arg Leu  
645 650 655

Pro Val Lys Trp Met Ala Pro Glu Ala Leu Phe Asp Arg Val Tyr Thr  
660 665 670

His Gln Ser Asp Val Trp Ser Phe Gly Val Leu Leu Trp Glu Ile Phe  
675 680 685

Thr Leu Gly Gly Ser Pro Tyr Pro Gly Ile Pro Val Glu Glu Leu Phe  
690 695 700

Lys Leu Leu Lys Glu Gly His Arg Met Asp Lys Pro Ala Asn Cys Thr  
705 710 715 720

His Asp Leu Tyr Met Ile Met Arg Glu Cys Trp His Ala Ala Pro Ser  
725 730 735

Gln Arg Pro Thr Phe Lys Gln Leu Val Glu Asp Leu Asp Arg Val Leu  
740 745 750

Thr Val Thr Ser Thr Asp Glu Tyr Leu Asp Leu Ser Ala Pro Phe Glu  
755 760 765

Gln Tyr Ser Pro Gly Gly Gln Asp Thr Pro Ser Ser Ser Ser Ser Gly  
770 775 780

Asp Asp Ser Val Phe Ala His Asp Leu Leu Pro Pro Ala Pro Pro Ser  
785 790 795 800

Ser Gly Gly Ser Arg Thr  
805

<210> 43

<211> 807

<212> PRT

<213> homo sapiens

<400> 43

Met Met Asp Ser Pro Phe Leu Glu Leu Trp Gln Ser Lys Ala Val Ser  
1 5 10 15

Ile Arg Glu Gln Leu Gly Leu Gly Asp Arg Pro Asn Asp Ser Tyr Cys  
20 25 30

Tyr Asn Ser Ala Lys Asn Ser Thr Val Leu Gln Gly Val Thr Phe Gly  
35 40 45

Gly Ile Pro Thr Val Leu Leu Ile Asp Val Ser Cys Phe Leu Phe Leu  
50 55 60

Ile Leu Val Phe Ser Ile Ile Arg Arg Arg Phe Trp Asp Tyr Gly Arg  
65 70 75 80

Ile Ala Leu Val Ser Glu Ala Asp Ser Glu Ser Arg Phe Gln Arg Leu  
85 90 95

Ser Ser Thr Ser Ser Ser Gly Gln Gln Asp Phe Glu Asn Glu Leu Gly  
100 105 110

Cys Cys Pro Trp Leu Thr Ala Ile Phe Arg Leu His Asp Asp Gln Ile  
115 120 125

Leu Glu Trp Cys Gly Glu Asp Ala Ile His Tyr Leu Ser Phe Gln Arg  
130 135 140

His Ile Ile Phe Leu Leu Val Val Val Ser Phe Leu Ser Leu Cys Val  
145 150 155 160

Ile Leu Pro Val Asn Leu Ser Gly Asp Leu Leu Asp Lys Asp Pro Tyr  
165 170 175

Ser Phe Gly Arg Thr Thr Ile Ala Asn Leu Gln Thr Asp Asn Asp Leu  
180 185 190

Leu Trp Leu His Thr Ile Phe Ala Val Ile Tyr Leu Phe Leu Thr Val

195

200

205

Gly Phe Met Arg His His Thr Gln Ser Ile Lys Tyr Lys Glu Glu Asn  
210 215 220

Leu Val Arg Arg Thr Leu Phe Ile Thr Gly Leu Pro Arg Asp Ala Arg  
225 230 235 240

Lys Glu Thr Val Glu Ser His Phe Arg Asp Ala Tyr Pro Thr Cys Glu  
245 250 255

Val Val Asp Val Gln Leu Cys Tyr Asn Val Ala Lys Leu Ile Tyr Leu  
260 265 270

Cys Lys Glu Lys Lys Lys Thr Glu Lys Ser Leu Thr Tyr Tyr Thr Asn  
275 280 285

Leu Gln Val Lys Thr Gly Gln Arg Thr Leu Ile Asn Pro Lys Pro Cys  
290 295 300

Gly Gln Phe Cys Cys Cys Glu Val Leu Gly Cys Glu Trp Glu Asp Ala  
305 310 315 320

Ile Ser Tyr Tyr Thr Arg Met Lys Asp Arg Leu Leu Glu Arg Ile Thr  
325 330 335

Glu Glu Glu Arg His Val Gln Asp Gln Pro Leu Gly Met Ala Phe Val  
340 345 350

Thr Phe Gln Glu Lys Ser Met Ala Thr Tyr Ile Leu Lys Asp Phe Asn  
355 360 365

Ala Cys Lys Cys Gln Ser Leu Gln Cys Lys Gly Glu Pro Gln Pro Ser  
370 375 380

Ser His Ser Arg Glu Leu Tyr Thr Ser Lys Trp Thr Val Thr Phe Ala  
385 390 395 400

Ala Asp Pro Glu Asp Ile Cys Trp Lys Asn Leu Ser Ile Gln Gly Leu  
405 410 415

Arg Trp Trp Leu Gln Trp Leu Gly Ile Asn Phe Thr Leu Phe Leu Gly  
420 425 430

Leu Phe Phe Leu Thr Thr Pro Ser Ile Ile Leu Ser Thr Met Asp Lys  
435 440 445

Phe Asn Val Thr Lys Pro Ile His Ala Leu Asn Asn Pro Ile Ile Ser  
 450 455 460

Gln Phe Phe Pro Thr Leu Leu Leu Trp Ser Phe Ser Ala Leu Leu Pro  
 465 470 475 480

Ser Ile Val Tyr Tyr Ser Thr Leu Leu Glu Ser His Trp Thr Lys Ser  
 485 490 495

Gly Glu Asn Gln Ile Met Met Thr Lys Val Tyr Ile Phe Leu Ile Phe  
 500 505 510

Met Val Leu Ile Leu Pro Ser Leu Gly Leu Thr Ser Leu Asp Phe Phe  
 515 520 525

Phe Arg Trp Leu Phe Asp Lys Thr Ser Ser Glu Ala Ser Ile Arg Leu  
 530 535 540

Glu Cys Val Phe Leu Pro Asp Gln Gly Ala Phe Phe Val Asn Tyr Val  
 545 550 555 560

Ile Ala Ser Ala Phe Ile Gly Asn Gly Met Glu Leu Leu Arg Leu Pro  
 565 570 575

Gly Leu Ile Leu Tyr Thr Phe Arg Met Ile Met Ala Lys Thr Ala Ala  
 580 585 590

Asp Arg Arg Asn Val Lys Gln Asn Gln Ala Phe Gln Tyr Glu Phe Gly  
 595 600 605

Ala Met Tyr Ala Trp Met Leu Cys Val Phe Thr Val Ile Val Ala Tyr  
 610 615 620

Ser Ile Thr Cys Pro Ile Ile Ala Pro Phe Gly Leu Ile Tyr Ile Leu  
 625 630 635 640

Leu Lys His Met Val Asp Arg His Asn Leu Tyr Phe Val Tyr Leu Pro  
 645 650 655

Ala Lys Leu Glu Lys Gly Ile His Phe Ala Ala Val Asn Gln Ala Leu  
 660 665 670

Ala Ala Pro Ile Leu Cys Leu Phe Trp Leu Tyr Phe Phe Ser Phe Leu  
 675 680 685

Arg Leu Gly Met Lys Ala Pro Ala Thr Leu Phe Thr Phe Leu Val Leu  
690 695 700

Leu Leu Thr Ile Leu Val Cys Leu Ala His Thr Cys Phe Gly Cys Phe  
705 710 715 720

Lys His Leu Ser Pro Leu Asn Tyr Lys Thr Glu Glu Pro Ala Ser Asp  
725 730 735

Lys Gly Ser Glu Ala Glu Ala His Met Pro Pro Pro Phe Thr Pro Tyr  
740 745 750

Val Pro Arg Ile Leu Asn Gly Leu Ala Ser Glu Arg Thr Ala Leu Ser  
755 760 765

Pro Gln Gln Gln Gln Gln Gln Thr Tyr Gly Ala Ile His Asn Ile Ser  
770 775 780

Gly Thr Ile Pro Gly Gln Cys Leu Ala Gln Ser Ala Thr Gly Ser Val  
785 790 795 800

Ala Ala Ala Pro Gln Glu Ala  
805

<210> 44

<211> 309

<212> PRT

<213> homo sapiens

<400> 44

Met Asn Gly Thr Tyr Asn Thr Cys Gly Ser Ser Asp Leu Thr Trp Pro  
1 5 10 15

Pro Ala Ile Lys Leu Gly Phe Tyr Ala Tyr Leu Gly Val Leu Leu Val  
20 25 30

Leu Gly Leu Leu Leu Asn Ser Leu Ala Leu Trp Val Phe Cys Cys Arg  
35 40 45

Met Gln Gln Trp Thr Glu Thr Arg Ile Tyr Met Thr Asn Leu Ala Val  
50 55 60

Ala Asp Leu Cys Leu Leu Cys Thr Leu Pro Phe Val Leu His Ser Leu  
65 70 75 80

Arg Asp Thr Ser Asp Thr Pro Leu Cys Gln Leu Ser Gln Gly Ile Tyr  
85 90 95

Leu Thr Asn Arg Tyr Met Ser Ile Ser Leu Val Thr Ala Ile Ala Val  
100 105 110

Asp Arg Tyr Val Ala Val Arg His Pro Leu Arg Ala Arg Gly Leu Arg  
115 120 125

Ser Pro Arg Gln Ala Ala Ala Val Cys Ala Val Leu Trp Val Leu Val  
130 135 140

Ile Gly Ser Leu Val Ala Arg Trp Leu Leu Gly Ile Gln Glu Gly Gly  
145 150 155 160

Phe Cys Phe Arg Ser Thr Arg His Asn Phe Asn Ser Met Arg Phe Pro  
165 170 175

Leu Leu Gly Phe Tyr Leu Pro Leu Ala Val Val Val Phe Cys Ser Leu  
180 185 190

Lys Val Val Thr Ala Leu Ala Gln Arg Pro Pro Thr Asp Val Gly Gln  
195 200 205

Ala Glu Ala Thr Arg Lys Ala Ala Arg Met Val Trp Ala Asn Leu Leu  
210 215 220

Val Phe Val Val Cys Phe Leu Pro Leu His Val Gly Leu Thr Val Arg  
225 230 235 240

Leu Ala Val Gly Trp Asn Ala Cys Ala Leu Leu Glu Thr Ile Arg Arg  
245 250 255

Ala Leu Tyr Ile Thr Ser Lys Leu Ser Asp Ala Asn Cys Cys Leu Asp  
260 265 270

Ala Ile Cys Tyr Tyr Tyr Met Ala Lys Glu Phe Gln Glu Ala Ser Ala  
275 280 285

Leu Ala Val Ala Pro Arg Ala Lys Ala His Lys Ser Gln Asp Ser Leu  
290 295 300

Cys Val Thr Leu Ala

305

<210> 45

<211> 95

<212> PRT

<213> homo sapiens

<400> 45

Met Thr Glu Leu Glu Thr Ala Met Gly Met Ile Ile Asp Val Phe Ser  
1 5 10 15

Arg Tyr Ser Gly Ser Glu Gly Ser Thr Gln Thr Leu Thr Lys Gly Glu  
20 25 30

Leu Lys Val Leu Met Glu Lys Glu Leu Pro Gly Phe Leu Gln Ser Gly  
35 40 45

Lys Asp Lys Asp Ala Val Asp Lys Leu Leu Lys Asp Leu Asp Ala Asn  
50 55 60

Gly Asp Ala Gln Val Asp Phe Ser Glu Phe Ile Val Phe Val Ala Ala  
65 70 75 80

Ile Thr Ser Ala Cys His Lys Tyr Phe Glu Lys Ala Gly Leu Lys  
85 90 95

<210> 46

<211> 345

<212> PRT

<213> homo sapiens

<400> 46

Met Gly Val Cys Gly Tyr Leu Phe Leu Pro Trp Lys Cys Leu Val Val  
1 5 10 15

Val Ser Leu Arg Leu Leu Phe Leu Val Pro Thr Gly Val Pro Val Arg  
20 25 30

Ser Gly Asp Ala Thr Phe Pro Lys Ala Met Asp Asn Val Thr Val Arg  
35 40 45

Gln Gly Glu Ser Ala Thr Leu Arg Cys Thr Ile Asp Asp Arg Val Thr  
50 55 60

Arg Val Ala Trp Leu Asn Arg Ser Thr Ile Leu Tyr Ala Gly Asn Asp  
65 70 75 80

Lys Trp Ser Ile Asp Pro Arg Val Ile Ile Leu Val Asn Thr Pro Thr  
85 90 95

Gln Tyr Ser Ile Met Ile Gln Asn Val Asp Val Tyr Asp Glu Gly Pro  
100 105 110

Tyr Thr Cys Ser Val Gln Thr Asp Asn His Pro Lys Thr Ser Arg Val  
115 120 125

His Leu Ile Val Gln Val Pro Pro Gln Ile Met Asn Ile Ser Ser Asp  
130 135 140

Ile Thr Val Asn Glu Gly Ser Ser Val Thr Leu Leu Cys Leu Ala Ile  
145 150 155 160

Gly Arg Pro Glu Pro Thr Val Thr Trp Arg His Leu Ser Val Lys Glu  
165 170 175

Gly Gln Gly Phe Val Ser Glu Asp Glu Tyr Leu Glu Ile Ser Asp Ile  
180 185 190

Lys Arg Asp Gln Ser Gly Glu Tyr Glu Cys Ser Ala Leu Asn Asp Val  
195 200 205

Ala Ala Pro Asp Val Arg Lys Val Lys Ile Thr Val Asn Tyr Pro Pro  
210 215 220

Tyr Ile Ser Lys Ala Lys Asn Thr Gly Val Ser Val Gly Gln Lys Gly  
225 230 235 240

Ile Leu Ser Cys Glu Ala Ser Ala Val Pro Met Ala Glu Phe Gln Trp  
245 250 255

Phe Lys Glu Glu Thr Arg Leu Ala Thr Gly Leu Asp Gly Met Arg Ile  
260 265 270

Glu Asn Lys Gly Arg Met Ser Thr Leu Thr Phe Phe Asn Val Ser Glu  
275 280 285



Lys Asp Tyr Gly Asn Tyr Thr Cys Val Ala Thr Asn Lys Leu Gly Asn  
 290 295 300

Thr Asn Ala Ser Ile Thr Leu Tyr Gly Pro Gly Ala Val Ile Asp Gly  
 305 310 315 320

Val Asn Ser Ala Ser Arg Ala Leu Ala Cys Leu Trp Leu Ser Gly Thr  
 325 330 335

Leu Leu Ala His Phe Phe Ile Lys Phe  
 340 345

<210> 47

<211> 211

<212> PRT

<213> homo sapiens

<400> 47

Met Ala Asn Ala Gly Leu Gln Leu Leu Gly Phe Ile Leu Ala Phe Leu  
 1 5 10 15

Gly Trp Ile Gly Ala Ile Val Ser Thr Ala Leu Pro Gln Trp Arg Ile  
 20 25 30

Tyr Ser Tyr Ala Gly Asp Asn Ile Val Thr Ala Gln Ala Met Tyr Glu  
 35 40 45

Gly Leu Trp Met Ser Cys Val Ser Gln Ser Thr Gly Gln Ile Gln Cys  
 50 55 60

Lys Val Phe Asp Ser Leu Leu Asn Leu Ser Ser Thr Leu Gln Ala Thr  
 65 70 75 80

Arg Ala Leu Met Val Val Gly Ile Leu Leu Gly Val Ile Ala Ile Phe  
 85 90 95

Val Ala Thr Val Gly Met Lys Cys Met Lys Cys Leu Glu Asp Asp Glu  
 100 105 110

Val Gln Lys Met Arg Met Ala Val Ile Gly Gly Ala Ile Phe Leu Leu  
 115 120 125

Ala Gly Leu Ala Ile Leu Val Ala Thr Ala Trp Tyr Gly Asn Arg Ile  
 130 135 140

Val Gln Glu Phe Tyr Asp Pro Met Thr Pro Val Asn Ala Arg Tyr Glu  
 145 150 155 160

Phe Gly Gln Ala Leu Phe Thr Gly Trp Ala Ala Ala Ser Leu Cys Leu  
 165 170 175

Leu Gly Gly Ala Leu Leu Cys Cys Ser Cys Pro Arg Lys Thr Thr Ser  
 180 185 190

Tyr Pro Thr Pro Arg Pro Tyr Pro Lys Pro Ala Pro Ser Ser Gly Lys  
 195 200 205

Asp Tyr Val  
 210

<210> 48

<211> 823

<212> PRT

<213> homo sapiens

<400> 48

Met Ala Leu Pro Arg Cys Thr Trp Pro Asn Tyr Val Trp Arg Ala Val  
 1 5 10 15

Met Ala Cys Leu Val His Arg Gly Leu Gly Ala Pro Leu Thr Leu Cys  
 20 25 30

Met Leu Gly Cys Leu Leu Gln Ala Gly His Val Leu Ser Gln Lys Leu  
 35 40 45

Asp Asp Val Asp Pro Leu Val Ala Thr Asn Phe Gly Lys Ile Arg Gly  
 50 55 60

Ile Lys Lys Glu Leu Asn Asn Glu Ile Leu Gly Pro Val Ile Gln Phe  
 65 70 75 80

Leu Gly Val Pro Tyr Ala Ala Pro Pro Thr Gly Glu Arg Arg Phe Gln  
 85 90 95

Pro Pro Glu Pro Pro Ser Pro Trp Ser Asp Ile Arg Asn Ala Thr Gln

	100		105		110
Phe Ala Pro Val Cys Pro Gln Asn Ile Ile Asp Gly Arg Leu Pro Glu					
	115		120		125
Val Met Leu Pro Val Trp Phe Thr Asn Asn Leu Asp Val Val Ser Ser					
	130		135		140
Tyr Val Gln Asp Gln Ser Glu Asp Cys Leu Tyr Leu Asn Ile Tyr Val					
	145		150		155
Pro Thr Glu Asp Asp Ile Arg Asp Ser Gly Gly Pro Lys Pro Val Met					
		165		170	175
Val Tyr Ile His Gly Gly Ser Tyr Met Glu Gly Thr Gly Asn Leu Tyr					
		180		185	190
Asp Gly Ser Val Leu Ala Ser Tyr Gly Asn Val Ile Val Ile Thr Val					
	195		200		205
Asn Tyr Arg Leu Gly Val Leu Gly Phe Leu Ser Thr Gly Asp Gln Ala					
	210		215		220
Ala Lys Gly Asn Tyr Gly Leu Leu Asp Leu Ile Gln Ala Leu Arg Trp					
	225		230		235
Thr Ser Glu Asn Ile Gly Phe Phe Gly Gly Asp Pro Leu Arg Ile Thr					
		245		250	255
Val Phe Gly Ser Gly Ala Gly Gly Ser Cys Val Asn Leu Leu Thr Leu					
		260		265	270
Ser His Tyr Ser Glu Gly Asn Arg Trp Ser Asn Ser Thr Lys Gly Leu					
	275		280		285
Phe Gln Arg Ala Ile Ala Gln Ser Gly Thr Ala Leu Ser Ser Trp Ala					
	290		295		300
Val Ser Phe Gln Pro Ala Lys Tyr Ala Arg Met Leu Ala Thr Lys Val					
	305		310		315
Gly Cys Asn Val Ser Asp Thr Val Glu Leu Val Glu Cys Leu Gln Lys					
		325		330	335
Lys Pro Tyr Lys Glu Leu Val Asp Gln Asp Ile Gln Pro Ala Arg Tyr					
	340		345		350

His Ile Ala Phe Gly Pro Val Ile Asp Gly Asp Val Ile Pro Asp Asp  
 355 360 365

Pro Gln Ile Leu Met Glu Gln Gly Glu Phe Leu Asn Tyr Asp Ile Met  
 370 375 380

Leu Gly Val Asn Gln Gly Glu Gly Leu Lys Phe Val Glu Asn Ile Val  
 385 390 395 400

Asp Ser Asp Asp Gly Ile Ser Ala Ser Asp Phe Asp Phe Ala Val Ser  
 405 410 415

Asn Phe Val Asp Asn Leu Tyr Gly Tyr Pro Glu Gly Lys Asp Val Leu  
 420 425 430

Arg Glu Thr Ile Lys Phe Met Tyr Thr Asp Trp Ala Asp Arg His Asn  
 435 440 445

Pro Glu Thr Arg Arg Lys Thr Leu Leu Ala Leu Phe Thr Asp His Gln  
 450 455 460

Trp Val Ala Pro Ala Val Ala Thr Ala Asp Leu His Ser Asn Phe Gly  
 465 470 475 480

Ser Pro Thr Tyr Phe Tyr Ala Phe Tyr His His Cys Gln Thr Asp Gln  
 485 490 495

Val Pro Ala Trp Ala Asp Ala Ala His Gly Asp Glu Val Pro Tyr Val  
 500 505 510

Leu Gly Ile Pro Met Ile Gly Pro Thr Glu Leu Phe Pro Cys Asn Phe  
 515 520 525

Ser Lys Asn Asp Val Met Leu Ser Ala Val Val Met Thr Tyr Trp Thr  
 530 535 540

Asn Phe Ala Lys Thr Gly Asp Pro Asn Gln Pro Val Pro Gln Asp Thr  
 545 550 555 560

Lys Phe Ile His Thr Lys Pro Asn Arg Phe Glu Glu Val Ala Trp Thr  
 565 570 575

Arg Tyr Ser Gln Lys Asp Gln Leu Tyr Leu His Ile Gly Leu Lys Pro  
 580 585 590

Arg Val Lys Glu His Tyr Arg Ala Asn Lys Val Asn Leu Trp Leu Glu  
595 600 605

Leu Val Pro His Leu His Asn Leu Asn Asp Ile Ser Gln Tyr Thr Ser  
610 615 620

Thr Thr Thr Lys Val Pro Ser Thr Asp Ile Thr Phe Arg Pro Thr Arg  
625 630 635 640

Lys Asn Ser Val Pro Val Thr Ser Ala Phe Pro Thr Ala Lys Gln Asp  
645 650 655

Asp Pro Lys Gln Gln Pro Ser Pro Phe Ser Val Asp Gln Arg Asp Tyr  
660 665 670

Ser Thr Glu Leu Ser Val Thr Ile Ala Val Gly Ala Ser Leu Leu Phe  
675 680 685

Leu Asn Ile Leu Ala Phe Ala Ala Leu Tyr Tyr Lys Lys Asp Lys Arg  
690 695 700

Arg His Asp Val His Arg Arg Cys Ser Pro Gln Arg Thr Thr Thr Asn  
705 710 715 720

Asp Leu Thr His Ala Gln Glu Glu Glu Ile Met Ser Leu Gln Met Lys  
725 730 735

His Thr Asp Leu Asp His Glu Cys Glu Ser Ile His Pro His Glu Val  
740 745 750

Val Leu Arg Thr Ala Cys Pro Pro Asp Tyr Thr Leu Ala Met Arg Arg  
755 760 765

Ser Pro Asp Asp Val Pro Leu Met Thr Pro Asn Thr Ile Thr Met Ile  
770 775 780

Pro Asn Thr Ile Pro Gly Ile Gln Pro Leu His Thr Phe Asn Thr Phe  
785 790 795 800

Thr Gly Gly Gln Asn Asn Thr Leu Pro His Pro His Pro His Pro His  
805 810 815

Ser His Ser Thr Thr Arg Val  
820

<210> 49

<211> 556

<212> PRT

<213> homo sapiens

<400> 49

Met Pro Ser Phe Asp Glu Ala Leu Gln Arg Val Gly Glu Phe Gly Arg  
1 5 10 15

Phe Gln Arg Arg Val Phe Leu Leu Leu Cys Leu Thr Gly Val Thr Phe  
20 25 30

Ala Phe Leu Phe Val Gly Val Val Phe Leu Gly Thr Gln Pro Asp His  
35 40 45

Tyr Trp Cys Arg Gly Pro Ser Ala Ala Ala Leu Ala Glu Arg Cys Gly  
50 55 60

Trp Ser Pro Glu Glu Glu Trp Asn Arg Thr Ala Pro Ala Ser Arg Gly  
65 70 75 80

Pro Glu Pro Pro Glu Arg Arg Gly Arg Cys Gln Arg Tyr Leu Leu Glu  
85 90 95

Ala Ala Asn Asp Ser Ala Ser Ala Thr Ser Ala Leu Ser Cys Ala Asp  
100 105 110

Pro Leu Ala Ala Phe Pro Asn Arg Ser Ala Pro Leu Val Pro Cys Arg  
115 120 125

Gly Gly Trp Arg Tyr Ala Gln Ala His Ser Thr Ile Val Ser Glu Phe  
130 135 140

Asp Leu Val Cys Val Asn Ala Trp Met Leu Asp Leu Thr Gln Ala Ile  
145 150 155 160

Leu Asn Leu Gly Phe Leu Thr Gly Ala Phe Thr Leu Gly Tyr Ala Ala  
165 170 175

Asp Arg Tyr Gly Arg Ile Val Ile Tyr Leu Leu Ser Cys Leu Gly Val  
180 185 190

Gly Val Thr Gly Val Val Val Ala Phe Ala Pro Asn Phe Pro Val Phe

195

200

205

Val Ile Phe Arg Phe Leu Gln Gly Val Phe Gly Lys Gly Thr Trp Met  
 210 215 220

Thr Cys Tyr Val Ile Val Thr Glu Ile Val Gly Ser Lys Gln Arg Arg  
 225 230 235 240

Ile Val Gly Ile Val Ile Gln Met Phe Phe Thr Leu Gly Ile Ile Ile  
 245 250 255

Leu Pro Gly Ile Ala Tyr Phe Ile Pro Asn Trp Gln Gly Ile Gln Leu  
 260 265 270

Ala Ile Thr Leu Pro Ser Phe Leu Phe Leu Leu Tyr Tyr Trp Val Val  
 275 280 285

Pro Glu Ser Pro Arg Trp Leu Ile Thr Arg Lys Lys Gly Asp Lys Ala  
 290 295 300

Leu Gln Ile Leu Arg Arg Ile Ala Lys Cys Asn Gly Lys Tyr Leu Ser  
 305 310 315 320

Ser Asn Tyr Ser Glu Ile Thr Val Thr Asp Glu Glu Val Ser Asn Pro  
 325 330 335

Ser Phe Leu Asp Leu Val Arg Thr Pro Gln Met Arg Lys Cys Thr Leu  
 340 345 350

Ile Leu Met Phe Ala Trp Phe Thr Ser Ala Val Val Tyr Gln Gly Leu  
 355 360 365

Val Met Arg Leu Gly Ile Ile Gly Gly Asn Leu Tyr Ile Asp Phe Phe  
 370 375 380

Ile Ser Gly Val Val Glu Leu Pro Gly Ala Leu Leu Ile Leu Leu Thr  
 385 390 395 400

Ile Glu Arg Leu Gly Arg Arg Leu Pro Phe Ala Ala Ser Asn Ile Val  
 405 410 415

Ala Gly Val Ala Cys Leu Val Thr Ala Phe Leu Pro Glu Gly Ile Ala  
 420 425 430

Trp Leu Arg Thr Thr Val Ala Thr Leu Gly Arg Leu Gly Ile Thr Met  
 435 440 445

Ala Phe Glu Ile Val Tyr Leu Val Asn Ser Glu Leu Tyr Pro Thr Thr  
450 455 460

Leu Arg Asn Phe Gly Val Ser Leu Cys Ser Gly Leu Cys Asp Phe Gly  
465 470 475 480

Gly Ile Ile Ala Pro Phe Leu Leu Phe Arg Leu Ala Ala Val Trp Leu  
485 490 495

Glu Leu Pro Leu Ile Ile Phe Gly Ile Leu Ala Ser Ile Cys Gly Gly  
500 505 510

Leu Val Met Leu Leu Pro Glu Thr Lys Gly Ile Ala Leu Pro Glu Thr  
515 520 525

Val Asp Asp Val Glu Lys Leu Gly Ser Pro His Ser Cys Lys Cys Gly  
530 535 540

Arg Asn Lys Lys Thr Pro Val Ser Arg Ser His Leu  
545 550 555

<210> 50

<211> 189

<212> PRT

<213> homo sapiens

<400> 50

Met Glu Glu Gly Gly Asn Leu Gly Gly Leu Ile Lys Met Val His Leu  
1 5 10 15

Leu Val Leu Ser Gly Ala Trp Gly Met Gln Met Trp Val Thr Phe Val  
20 25 30

Ser Gly Phe Leu Leu Phe Arg Ser Leu Pro Arg His Thr Phe Gly Leu  
35 40 45

Val Gln Ser Lys Leu Phe Pro Phe Tyr Phe His Ile Ser Met Gly Cys  
50 55 60

Ala Phe Ile Asn Leu Cys Ile Leu Ala Ser Gln His Ala Trp Ala Gln  
65 70 75 80



Leu Thr Phe Trp Glu Ala Ser Gln Leu Tyr Leu Leu Phe Leu Ser Leu  
85 90 95

Thr Leu Ala Thr Val Asn Ala Arg Trp Leu Glu Pro Arg Thr Thr Ala  
100 105 110

Ala Met Trp Ala Leu Gln Thr Val Glu Lys Glu Arg Gly Leu Gly Gly  
115 120 125

Glu Val Pro Gly Ser His Gln Gly Pro Asp Pro Tyr Arg Gln Leu Arg  
130 135 140

Glu Lys Asp Pro Lys Tyr Ser Ala Leu Arg Gln Asn Phe Phe Arg Tyr  
145 150 155 160

His Gly Leu Ser Ser Leu Cys Asn Leu Gly Cys Val Leu Ser Asn Gly  
165 170 175

Leu Cys Leu Ala Gly Leu Ala Leu Glu Ile Arg Ser Leu  
180 185

<210> 51

<211> 184

<212> PRT

<213> homo sapiens

<400> 51

Met Ser Trp Val Pro Gly Val Gly Met Glu Ile Arg Gly Glu Pro Gly  
1 5 10 15

Ser Ala Leu Thr Pro Leu Trp Ser Pro Tyr Pro Ala Gly Phe Leu Leu  
20 25 30

Phe Arg Ser Leu Pro Arg His Thr Phe Gly Leu Val Gln Ser Lys Leu  
35 40 45

Phe Pro Phe Tyr Phe His Ile Ser Met Gly Cys Ala Phe Ile Asn Leu  
50 55 60

Cys Ile Leu Ala Ser Gln His Ala Trp Ala Gln Leu Thr Phe Trp Glu  
65 70 75 80

Ala Ser Gln Leu Tyr Leu Leu Phe Leu Ser Leu Thr Leu Ala Thr Val  
85 90 95

Asn Ala Arg Trp Leu Glu Pro Arg Thr Thr Ala Ala Met Trp Ala Leu  
100 105 110

Gln Thr Val Glu Lys Glu Arg Gly Leu Gly Gly Glu Val Pro Gly Ser  
115 120 125

His Gln Gly Pro Asp Pro Tyr Arg Gln Leu Arg Glu Lys Asp Pro Lys  
130 135 140

Tyr Ser Ala Leu Arg Gln Asn Phe Phe Arg Tyr His Gly Leu Ser Ser  
145 150 155 160

Leu Cys Asn Leu Gly Cys Val Leu Ser Asn Gly Leu Cys Leu Ala Gly  
165 170 175

Leu Ala Leu Glu Ile Arg Ser Leu  
180

<210> 52

<211> 168

<212> PRT

<213> homo sapiens

<400> 52

Met Glu Glu Gly Gly Asn Leu Gly Gly Leu Ile Lys Met Val His Leu  
1 5 10 15

Leu Val Leu Ser Gly Ala Trp Gly Met Gln Met Trp Val Thr Phe Val  
20 25 30

Ser Gly Phe Leu Leu Phe Arg Ser Leu Pro Arg His Thr Phe Gly Leu  
35 40 45

Val Gln Ser Lys Leu Phe Pro Phe Tyr Phe His Ile Ser Met Gly Cys  
50 55 60

Ala Phe Ile Asn Leu Cys Ile Leu Ala Ser Gln His Ala Trp Ala Gln  
65 70 75 80

Leu Thr Phe Trp Glu Ala Ser Gln Leu Tyr Leu Leu Phe Leu Ser Leu

85

90

95

Thr Leu Ala Thr Val Asn Ala Arg Leu Gly Gly Glu Val Pro Gly Ser  
100 105 110

His Gln Gly Pro Asp Pro Tyr Arg Gln Leu Arg Glu Lys Asp Pro Lys  
115 120 125

Tyr Ser Ala Leu Arg Gln Asn Phe Phe Arg Tyr His Gly Leu Ser Ser  
130 135 140

Leu Cys Asn Leu Gly Cys Val Leu Ser Asn Gly Leu Cys Leu Ala Gly  
145 150 155 160

Leu Ala Leu Glu Ile Arg Ser Leu  
165

<210> 53

<211> 339

<212> PRT

<213> homo sapiens

<400> 53

Met Glu Ser Arg Lys Asp Ile Thr Asn Gln Glu Glu Leu Trp Lys Met  
1 5 10 15

Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu His Lys Asp Thr  
20 25 30

Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His Leu His Gln  
35 40 45

Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu Leu Gln His Thr  
50 55 60

Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile Lys Ile Ala Ala Ile  
65 70 75 80

Ile Ala Ser Leu Thr Phe Leu Tyr Thr Leu Leu Arg Glu Val Ile His  
85 90 95

Pro Leu Ala Thr Ser His Gln Gln Tyr Phe Tyr Lys Ile Pro Ile Leu  
100 105 110

Val Ile Asn Lys Val Leu Pro Met Val Ser Ile Thr Leu Leu Ala Leu  
 115 120 125

Val Tyr Leu Pro Gly Val Ile Ala Ala Ile Val Gln Leu His Asn Gly  
 130 135 140

Thr Lys Tyr Lys Lys Phe Pro His Trp Leu Asp Lys Trp Met Leu Thr  
 145 150 155 160

Arg Lys Gln Phe Gly Leu Leu Ser Phe Phe Phe Ala Val Leu His Ala  
 165 170 175

Ile Tyr Ser Leu Ser Tyr Pro Met Arg Arg Ser Tyr Arg Tyr Lys Leu  
 180 185 190

Leu Asn Trp Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp  
 195 200 205

Ile Glu His Asp Val Trp Arg Met Glu Ile Tyr Val Ser Leu Gly Ile  
 210 215 220

Val Gly Leu Ala Ile Leu Ala Leu Leu Ala Val Thr Ser Ile Pro Ser  
 225 230 235 240

Val Ser Asp Ser Leu Thr Trp Arg Glu Phe His Tyr Ile Gln Ser Lys  
 245 250 255

Leu Gly Ile Val Ser Leu Leu Leu Gly Thr Ile His Ala Leu Ile Phe  
 260 265 270

Ala Trp Asn Lys Trp Ile Asp Ile Lys Gln Phe Val Trp Tyr Thr Pro  
 275 280 285

Pro Thr Phe Met Ile Ala Val Phe Leu Pro Ile Val Val Leu Ile Phe  
 290 295 300

Lys Ser Ile Leu Phe Leu Pro Cys Leu Arg Lys Lys Ile Leu Lys Ile  
 305 310 315 320

Arg His Gly Trp Glu Asp Val Thr Lys Ile Asn Lys Thr Glu Ile Cys  
 325 330 335

Ser Gln Leu

<210> 54

<211> 230

<212> PRT

<213> homo sapiens

<400> 54

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu Leu  
1 5 10 15

Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp Lys Thr  
20 25 30

Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly Phe Ser Lys  
35 40 45

Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly Ile Thr Gln Cys  
50 55 60

Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala Asp Ile Gln Ala Ala  
65 70 75 80

Gln Ala Met Met Val Thr Ser Ser Ala Ile Ser Ser Leu Ala Cys Ile  
85 90 95

Ile Ser Val Val Gly Met Arg Cys Thr Val Phe Cys Gln Glu Ser Arg  
100 105 110

Ala Lys Asp Arg Val Ala Val Ala Gly Gly Val Phe Phe Ile Leu Gly  
115 120 125

Gly Leu Leu Gly Phe Ile Pro Val Ala Trp Asn Leu His Gly Ile Leu  
130 135 140

Arg Asp Phe Tyr Ser Pro Leu Val Pro Asp Ser Met Lys Phe Glu Ile  
145 150 155 160

Gly Glu Ala Leu Tyr Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile  
165 170 175

Ala Gly Ile Ile Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser  
180 185 190

Asn Tyr Tyr Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser  
 195 200 205

Pro Arg Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr  
 210 215 220

Ser Leu Thr Gly Tyr Val  
 225 230

<210> 55

<211> 470

<212> PRT

<213> homo sapiens

<400> 55

Met Glu Pro Ser Leu Ser Ser Glu Thr Ile Glu Arg Leu Glu Val Ser  
 1 5 10 15

Ser Leu Ala Gln Thr Ser Ser Ala Val Ala Ser Ser Thr Asp Gly Ser  
 20 25 30

Ile His Thr Asp Ser Val Asp Gly Thr Pro Asp Pro Gln Arg Thr Lys  
 35 40 45

Ala Ala Ile Ala His Leu Gln Gln Lys Ile Leu Lys Leu Thr Glu Gln  
 50 55 60

Ile Lys Ile Ala Gln Thr Ala Arg Asp Asp Asn Val Ala Glu Tyr Leu  
 65 70 75 80

Lys Leu Ala Asn Ser Ala Asp Lys Gln Gln Ala Ala Arg Ile Lys Gln  
 85 90 95

Val Phe Glu Lys Lys Asn Gln Lys Ser Ala Gln Thr Ile Leu Gln Leu  
 100 105 110

Gln Lys Lys Leu Glu His Tyr His Arg Lys Leu Arg Glu Val Glu Gln  
 115 120 125

Asn Gly Ile Pro Arg Gln Pro Lys Asp Val Phe Arg Asp Met His Gln  
 130 135 140

Gly Leu Lys Asp Val Gly Ala Lys Val Thr Gly Phe Ser Glu Gly Val

145		150		155		160
Val Asp Ser Val Lys Gly Gly Phe Ser Ser Phe Ser Gln Ala Thr His						
	165			170		175
Ser Ala Ala Gly Ala Val Val Ser Lys Pro Arg Glu Ile Ala Ser Leu						
	180			185		190
Ile Arg Asn Lys Phe Gly Ser Ala Asp Asn Ile Pro Asn Leu Lys Asp						
	195			200		205
Ser Leu Glu Glu Gly Gln Val Asp Asp Ala Gly Lys Ala Leu Gly Val						
	210			215		220
Ile Ser Asn Phe Gln Ser Ser Pro Lys Tyr Gly Ser Glu Glu Asp Cys						
	225			230		235
Ser Ser Ala Thr Ser Gly Ser Val Gly Ala Asn Ser Thr Thr Gly Gly						
	245			250		255
Ile Ala Val Gly Ala Ser Ser Ser Lys Thr Asn Thr Leu Asp Met Gln						
	260			265		270
Ser Ser Gly Phe Asp Ala Leu Leu His Glu Ile Gln Glu Ile Arg Glu						
	275			280		285
Thr Gln Ala Arg Leu Glu Glu Ser Phe Glu Thr Leu Lys Glu His Tyr						
	290			295		300
Gln Arg Asp Tyr Ser Leu Ile Met Gln Thr Leu Gln Glu Glu Arg Tyr						
	305			310		315
Arg Cys Glu Arg Leu Glu Glu Gln Leu Asn Asp Leu Thr Glu Leu His						
	325			330		335
Gln Asn Glu Ile Leu Asn Leu Lys Gln Glu Leu Ala Ser Met Glu Glu						
	340			345		350
Lys Ile Ala Tyr Gln Ser Tyr Glu Arg Ala Arg Asp Ile Gln Glu Ala						
	355			360		365
Leu Glu Ala Cys Gln Thr Arg Ile Ser Lys Met Glu Leu Gln Gln Gln						
	370			375		380
Gln Gln Gln Val Val Gln Leu Glu Gly Leu Glu Asn Ala Thr Ala Arg						
	385			390		395
						400

Asn Leu Leu Gly Lys Leu Ile Asn Ile Leu Leu Ala Val Met Ala Val  
 405 410 415

Leu Leu Val Phe Val Ser Thr Val Ala Asn Cys Val Val Pro Leu Met  
 420 425 430

Lys Thr Arg Asn Arg Thr Phe Ser Thr Leu Phe Leu Val Val Phe Ile  
 435 440 445

Ala Phe Leu Trp Lys His Trp Asp Ala Leu Phe Ser Tyr Val Glu Arg  
 450 455 460

Phe Phe Ser Ser Pro Arg  
 465 470

<210> 56

<211> 381

<212> PRT

<213> homo sapiens

<400> 56

Met Thr Val Ala Arg Pro Ser Val Pro Ala Ala Leu Pro Leu Leu Gly  
 1 5 10 15

Glu Leu Pro Arg Leu Leu Leu Leu Val Leu Leu Cys Leu Pro Ala Val  
 20 25 30

Trp Gly Asp Cys Gly Leu Pro Pro Asp Val Pro Asn Ala Gln Pro Ala  
 35 40 45

Leu Glu Gly Arg Thr Ser Phe Pro Glu Asp Thr Val Ile Thr Tyr Lys  
 50 55 60

Cys Glu Glu Ser Phe Val Lys Ile Pro Gly Glu Lys Asp Ser Val Ile  
 65 70 75 80

Cys Leu Lys Gly Ser Gln Trp Ser Asp Ile Glu Glu Phe Cys Asn Arg  
 85 90 95

Ser Cys Glu Val Pro Thr Arg Leu Asn Ser Ala Ser Leu Lys Gln Pro  
 100 105 110



Tyr Ile Thr Gln Asn Tyr Phe Pro Val Gly Thr Val Val Glu Tyr Glu  
 115 120 125

Cys Arg Pro Gly Tyr Arg Arg Glu Pro Ser Leu Ser Pro Lys Leu Thr  
 130 135 140

Cys Leu Gln Asn Leu Lys Trp Ser Thr Ala Val Glu Phe Cys Lys Lys  
 145 150 155 160

Lys Ser Cys Pro Asn Pro Gly Glu Ile Arg Asn Gly Gln Ile Asp Val  
 165 170 175

Pro Gly Gly Ile Leu Phe Gly Ala Thr Ile Ser Phe Ser Cys Asn Thr  
 180 185 190

Gly Tyr Lys Leu Phe Gly Ser Thr Ser Ser Phe Cys Leu Ile Ser Gly  
 195 200 205

Ser Ser Val Gln Trp Ser Asp Pro Leu Pro Glu Cys Arg Glu Ile Tyr  
 210 215 220

Cys Pro Ala Pro Pro Gln Ile Asp Asn Gly Ile Ile Gln Gly Glu Arg  
 225 230 235 240

Asp His Tyr Gly Tyr Arg Gln Ser Val Thr Tyr Ala Cys Asn Lys Gly  
 245 250 255

Phe Thr Met Ile Gly Glu His Ser Ile Tyr Cys Thr Val Asn Asn Asp  
 260 265 270

Glu Gly Glu Trp Ser Gly Pro Pro Pro Glu Cys Arg Gly Lys Ser Leu  
 275 280 285

Thr Ser Lys Val Pro Pro Thr Val Gln Lys Pro Thr Thr Val Asn Val  
 290 295 300

Pro Thr Thr Glu Val Ser Pro Thr Ser Gln Lys Thr Thr Thr Lys Thr  
 305 310 315 320

Thr Thr Pro Asn Ala Gln Ala Thr Arg Ser Thr Pro Val Ser Arg Thr  
 325 330 335

Thr Lys His Phe His Glu Thr Thr Pro Asn Lys Gly Ser Gly Thr Thr  
 340 345 350

Ser Gly Thr Thr Arg Leu Leu Ser Gly His Thr Cys Phe Thr Leu Thr  
 355 360 365

Gly Leu Leu Gly Thr Leu Val Thr Met Gly Leu Leu Thr  
 370 375 380

<210> 57

<211> 722

<212> PRT

<213> homo sapiens

<400> 57

Met Pro Leu His Gln Leu Gly Asp Lys Pro Leu Thr Phe Pro Ser Pro  
 1 5 10 15

Asn Ser Ala Met Glu Asn Gly Leu Asp His Thr Pro Pro Ser Arg Arg  
 20 25 30

Ala Ser Pro Gly Thr Pro Leu Ser Pro Gly Ser Leu Arg Ser Ala Ala  
 35 40 45

His Ser Pro Leu Asp Thr Ser Lys Gln Pro Leu Cys Gln Leu Trp Ala  
 50 55 60

Glu Lys His Gly Ala Arg Gly Thr His Glu Val Arg Tyr Val Ser Ala  
 65 70 75 80

Gly Gln Ser Val Ala Cys Gly Trp Trp Ala Phe Ala Pro Pro Cys Leu  
 85 90 95

Gln Val Leu Asn Thr Pro Lys Gly Ile Leu Phe Phe Leu Cys Ala Ala  
 100 105 110

Ala Phe Leu Gln Gly Met Thr Val Asn Gly Phe Ile Asn Thr Val Ile  
 115 120 125

Thr Ser Leu Glu Arg Arg Tyr Asp Leu His Ser Tyr Gln Ser Gly Leu  
 130 135 140

Ile Ala Ser Ser Tyr Asp Ile Ala Ala Cys Leu Cys Leu Thr Phe Val  
 145 150 155 160

Ser Tyr Phe Gly Gly Ser Gly His Lys Pro Arg Trp Leu Gly Trp Gly

165

170

175

Val Leu Leu Met Gly Thr Gly Ser Leu Val Phe Ala Leu Pro His Phe  
180 185 190

Thr Ala Gly Arg Tyr Glu Val Glu Leu Asp Ala Gly Val Arg Thr Cys  
195 200 205

Pro Ala Asn Pro Gly Ala Val Cys Ala Asp Ser Thr Ser Gly Leu Ser  
210 215 220

Arg Tyr Gln Leu Val Phe Met Leu Gly Gln Phe Leu His Gly Val Gly  
225 230 235 240

Ala Thr Pro Leu Tyr Thr Leu Gly Val Thr Tyr Leu Asp Glu Asn Val  
245 250 255

Lys Ser Ser Cys Ser Pro Val Tyr Ile Ala Ile Phe Tyr Thr Ala Ala  
260 265 270

Ile Leu Gly Pro Ala Ala Gly Tyr Leu Ile Gly Gly Ala Leu Leu Asn  
275 280 285

Ile Tyr Thr Glu Met Gly Arg Arg Thr Glu Leu Thr Thr Glu Ser Pro  
290 295 300

Leu Trp Val Gly Ala Trp Trp Val Gly Phe Leu Gly Ser Gly Ala Ala  
305 310 315 320

Ala Phe Phe Thr Ala Val Pro Ile Leu Gly Tyr Pro Arg Gln Leu Pro  
325 330 335

Gly Ser Gln Arg Tyr Ala Val Met Arg Ala Ala Glu Met His Gln Leu  
340 345 350

Lys Asp Ser Ser Arg Gly Glu Ala Ser Asn Pro Asp Phe Gly Lys Thr  
355 360 365

Ile Arg Asp Leu Pro Leu Ser Ile Trp Leu Leu Leu Lys Asn Pro Thr  
370 375 380

Phe Ile Leu Leu Cys Leu Ala Gly Ala Thr Glu Ala Thr Leu Ile Thr  
385 390 395 400

Gly Met Ser Thr Phe Ser Pro Lys Phe Leu Glu Ser Gln Phe Ser Leu  
405 410 415

Ser Ala Ser Glu Ala Ala Thr Leu Phe Gly Tyr Leu Val Val Pro Ala  
 420 425 430

Gly Gly Gly Gly Thr Phe Leu Gly Gly Phe Phe Val Asn Lys Leu Arg  
 435 440 445

Leu Arg Gly Ser Ala Val Ile Lys Phe Cys Leu Phe Cys Thr Val Val  
 450 455 460

Ser Leu Leu Gly Ile Leu Val Phe Ser Leu His Cys Pro Ser Val Pro  
 465 470 475 480

Met Ala Gly Val Thr Ala Ser Tyr Gly Gly Ser Leu Leu Pro Glu Gly  
 485 490 495

His Leu Asn Leu Thr Ala Pro Cys Asn Ala Ala Cys Ser Cys Gln Pro  
 500 505 510

Glu His Tyr Ser Pro Val Cys Gly Ser Asp Gly Leu Met Tyr Phe Ser  
 515 520 525

Leu Cys His Ala Gly Cys Pro Ala Ala Thr Glu Thr Asn Val Asp Gly  
 530 535 540

Gln Lys Val Tyr Arg Asp Cys Ser Cys Ile Pro Gln Asn Leu Ser Ser  
 545 550 555 560

Gly Phe Gly His Ala Thr Ala Gly Lys Cys Thr Ser Thr Cys Gln Arg  
 565 570 575

Lys Pro Leu Leu Leu Val Phe Ile Phe Val Val Ile Phe Phe Thr Phe  
 580 585 590

Leu Ser Ser Ile Pro Ala Leu Thr Ala Thr Leu Arg Cys Val Arg Asp  
 595 600 605

Pro Gln Arg Ser Phe Ala Leu Gly Ile Gln Trp Ile Val Val Arg Ile  
 610 615 620

Leu Gly Gly Ile Pro Gly Pro Ile Ala Phe Gly Trp Val Ile Asp Lys  
 625 630 635 640

Ala Cys Leu Leu Trp Gln Asp Gln Cys Gly Gln Gln Gly Ser Cys Leu  
 645 650 655

Val Tyr Gln Asn Ser Ala Met Ser Arg Tyr Ile Leu Ile Met Gly Leu  
660 665 670

Leu Tyr Lys Val Leu Gly Val Leu Phe Phe Ala Ile Ala Cys Phe Leu  
675 680 685

Tyr Lys Pro Leu Ser Glu Ser Ser Asp Gly Leu Glu Thr Cys Leu Pro  
690 695 700

Ser Gln Ser Ser Ala Pro Asp Ser Ala Thr Asp Ser Gln Leu Gln Ser  
705 710 715 720

Ser Val

<210> 58

<211> 1212

<212> PRT

<213> homo sapiens

<400> 58

Met Glu Pro Arg Pro Thr Ala Pro Ser Ser Gly Ala Pro Gly Leu Ala  
1 5 10 15

Gly Val Gly Glu Thr Pro Ser Ala Ala Ala Leu Ala Ala Ala Arg Val  
20 25 30

Glu Leu Pro Gly Thr Ala Val Pro Ser Val Pro Glu Asp Ala Ala Pro  
35 40 45

Ala Ser Arg Asp Gly Gly Gly Val Arg Asp Glu Gly Pro Ala Ala Ala  
50 55 60

Gly Asp Gly Leu Gly Arg Pro Leu Gly Pro Thr Pro Ser Gln Ser Arg  
65 70 75 80

Phe Gln Val Asp Leu Val Ser Glu Asn Ala Gly Arg Ala Ala Ala Ala  
85 90 95

Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gly Ala Gly Ala Gly  
100 105 110

Ala Lys Gln Thr Pro Ala Asp Gly Glu Ala Ser Gly Glu Ser Glu Pro  
 115 120 125

Ala Lys Gly Ser Glu Glu Ala Lys Gly Arg Phe Arg Val Asn Phe Val  
 130 135 140

Asp Pro Ala Ala Ser Ser Ser Ala Glu Asp Ser Leu Ser Asp Ala Ala  
 145 150 155 160

Gly Val Gly Val Asp Gly Pro Asn Val Ser Phe Gln Asn Gly Gly Asp  
 165 170 175

Thr Val Leu Ser Glu Gly Ser Ser Leu His Ser Gly Gly Gly Gly Gly  
 180 185 190

Ser Gly His His Gln His Tyr Tyr Tyr Asp Thr His Thr Asn Thr Tyr  
 195 200 205

Tyr Leu Arg Thr Phe Gly His Asn Thr Met Asp Ala Val Pro Arg Ile  
 210 215 220

Asp His Tyr Arg His Thr Ala Ala Gln Leu Gly Glu Lys Leu Leu Arg  
 225 230 235 240

Pro Ser Leu Ala Glu Leu His Asp Glu Leu Glu Lys Glu Pro Phe Glu  
 245 250 255

Asp Gly Phe Ala Asn Gly Glu Glu Ser Thr Pro Thr Arg Asp Ala Val  
 260 265 270

Val Thr Tyr Thr Ala Glu Ser Lys Gly Val Val Lys Phe Gly Trp Ile  
 275 280 285

Lys Gly Val Leu Val Arg Cys Met Leu Asn Ile Trp Gly Val Met Leu  
 290 295 300

Phe Ile Arg Leu Ser Trp Ile Val Gly Gln Ala Gly Ile Gly Leu Ser  
 305 310 315 320

Val Leu Val Ile Met Met Ala Thr Val Val Thr Thr Ile Thr Gly Leu  
 325 330 335

Ser Thr Ser Ala Ile Ala Thr Asn Gly Phe Val Arg Gly Gly Gly Ala  
 340 345 350

Tyr Tyr Leu Ile Ser Arg Ser Leu Gly Pro Glu Phe Gly Gly Ala Ile

355

360

365

Gly Leu Ile Phe Ala Phe Ala Asn Ala Val Ala Val Ala Met Tyr Val  
 370 375 380

Val Gly Phe Ala Glu Thr Val Val Glu Leu Leu Lys Glu His Ser Ile  
 385 390 395 400

Leu Met Ile Asp Glu Ile Asn Asp Ile Arg Ile Ile Gly Ala Ile Thr  
 405 410 415

Val Val Ile Leu Leu Gly Ile Ser Val Ala Gly Met Glu Trp Glu Ala  
 420 425 430

Lys Ala Gln Ile Val Leu Leu Val Ile Leu Leu Leu Ala Ile Gly Asp  
 435 440 445

Phe Val Ile Gly Thr Phe Ile Pro Leu Glu Ser Lys Lys Pro Lys Gly  
 450 455 460

Phe Phe Gly Tyr Lys Ser Glu Ile Phe Asn Glu Asn Phe Gly Pro Asp  
 465 470 475 480

Phe Arg Glu Glu Glu Thr Phe Phe Ser Val Phe Ala Ile Phe Phe Pro  
 485 490 495

Ala Ala Thr Gly Ile Leu Ala Gly Ala Asn Ile Ser Gly Asp Leu Ala  
 500 505 510

Asp Pro Gln Ser Ala Ile Pro Lys Gly Thr Leu Leu Ala Ile Leu Ile  
 515 520 525

Thr Thr Leu Val Tyr Val Gly Ile Ala Val Ser Val Gly Ser Cys Val  
 530 535 540

Val Arg Asp Ala Thr Gly Asn Val Asn Asp Thr Ile Val Thr Glu Leu  
 545 550 555 560

Thr Asn Cys Thr Ser Ala Ala Cys Lys Leu Asn Phe Asp Phe Ser Ser  
 565 570 575

Cys Glu Ser Ser Pro Cys Ser Tyr Gly Leu Met Asn Asn Phe Gln Val  
 580 585 590

Met Ser Met Val Ser Gly Phe Thr Pro Leu Ile Ser Ala Gly Ile Phe  
 595 600 605

Ser Ala Thr Leu Ser Ser Ala Leu Ala Ser Leu Val Ser Ala Pro Lys  
610 615 620

Ile Phe Gln Ala Leu Cys Lys Asp Asn Ile Tyr Pro Ala Phe Gln Met  
625 630 635 640

Phe Ala Lys Gly Tyr Gly Lys Asn Asn Glu Pro Leu Arg Gly Tyr Ile  
645 650 655

Leu Thr Phe Leu Ile Ala Leu Gly Phe Ile Leu Ile Ala Glu Leu Asn  
660 665 670

Val Ile Ala Pro Ile Ile Ser Asn Phe Phe Leu Ala Ser Tyr Ala Leu  
675 680 685

Ile Asn Phe Ser Val Phe His Ala Ser Leu Ala Lys Ser Pro Gly Trp  
690 695 700

Arg Pro Ala Phe Lys Tyr Tyr Asn Met Trp Ile Ser Leu Leu Gly Ala  
705 710 715 720

Ile Leu Cys Cys Ile Val Met Phe Val Ile Asn Trp Trp Ala Ala Leu  
725 730 735

Leu Thr Tyr Val Ile Val Leu Gly Leu Tyr Ile Tyr Val Thr Tyr Lys  
740 745 750

Lys Pro Asp Val Asn Trp Gly Ser Ser Thr Gln Ala Leu Thr Tyr Leu  
755 760 765

Asn Ala Leu Gln His Ser Ile Arg Leu Ser Gly Val Glu Asp His Val  
770 775 780

Lys Asn Phe Arg Pro Gln Cys Leu Val Met Thr Gly Ala Pro Asn Ser  
785 790 795 800

Arg Pro Ala Leu Leu His Leu Val His Asp Phe Thr Lys Asn Val Gly  
805 810 815

Leu Met Ile Cys Gly His Val His Met Gly Pro Arg Arg Gln Ala Met  
820 825 830

Lys Glu Met Ser Ile Asp Gln Ala Lys Tyr Gln Arg Trp Leu Ile Lys  
835 840 845



Asn Lys Met Lys Ala Phe Tyr Ala Pro Val His Ala Asp Asp Leu Arg  
850 855 860

Glu Gly Ala Gln Tyr Leu Met Gln Ala Ala Gly Leu Gly Arg Met Lys  
865 870 875 880

Pro Asn Thr Leu Val Leu Gly Phe Lys Lys Asp Trp Leu Gln Ala Asp  
885 890 895

Met Arg Asp Val Asp Met Tyr Ile Asn Leu Phe His Asp Ala Phe Asp  
900 905 910

Ile Gln Tyr Gly Val Val Val Ile Arg Leu Lys Glu Gly Leu Asp Ile  
915 920 925

Ser His Leu Gln Gly Gln Glu Glu Leu Leu Ser Ser Gln Glu Lys Ser  
930 935 940

Pro Gly Thr Lys Asp Val Val Val Ser Val Glu Tyr Ser Lys Lys Ser  
945 950 955 960

Asp Leu Asp Thr Ser Lys Pro Leu Ser Glu Lys Pro Ile Thr His Lys  
965 970 975

Val Glu Glu Glu Asp Gly Lys Thr Ala Thr Gln Pro Leu Leu Lys Lys  
980 985 990

Glu Ser Lys Gly Pro Ile Val Pro Leu Asn Val Ala Asp Gln Lys Leu  
995 1000 1005

Leu Glu Ala Ser Thr Gln Phe Gln Lys Lys Gln Gly Lys Asn Thr  
1010 1015 1020

Ile Asp Val Trp Trp Leu Phe Asp Asp Gly Gly Leu Thr Leu Leu  
1025 1030 1035

Ile Pro Tyr Leu Leu Thr Thr Lys Lys Lys Trp Lys Asp Cys Lys  
1040 1045 1050

Ile Arg Val Phe Ile Gly Gly Lys Ile Asn Arg Ile Asp His Asp  
1055 1060 1065

Arg Arg Ala Met Ala Thr Leu Leu Ser Lys Phe Arg Ile Asp Phe  
1070 1075 1080

Ser Asp Ile Met Val Leu Gly Asp Ile Asn Thr Lys Pro Lys Lys  
1085 1090 1095

Glu Asn Ile Ile Ala Phe Glu Glu Ile Ile Glu Pro Tyr Arg Leu  
1100 1105 1110

His Glu Asp Asp Lys Glu Gln Asp Ile Ala Asp Lys Met Lys Glu  
1115 1120 1125

Asp Glu Pro Trp Arg Ile Thr Asp Asn Glu Leu Glu Leu Tyr Lys  
1130 1135 1140

Thr Lys Thr Tyr Arg Gln Ile Arg Leu Asn Glu Leu Leu Lys Glu  
1145 1150 1155

His Ser Ser Thr Ala Asn Ile Ile Val Met Ser Leu Pro Val Ala  
1160 1165 1170

Arg Lys Gly Ala Val Ser Ser Ala Leu Tyr Met Ala Trp Leu Glu  
1175 1180 1185

Ala Leu Ser Lys Asp Leu Pro Pro Ile Leu Leu Val Arg Gly Asn  
1190 1195 1200

His Gln Ser Val Leu Thr Phe Tyr Ser  
1205 1210

<210> 59

<211> 475

<212> PRT

<213> homo sapiens

<400> 59

Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Thr  
1 5 10 15

Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly  
20 25 30

Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser  
35 40 45

Thr Glu Lys Asn Ala Val Ser Met Thr Ser Ser Val Leu Ser Ser His

50

55

60

Ser Pro Gly Ser Gly Ser Ser Thr Thr Gln Gly Gln Asp Val Thr Leu  
65 70 75 80

Ala Pro Ala Thr Glu Pro Ala Ser Gly Ser Ala Ala Thr Trp Gly Gln  
85 90 95

Asp Val Thr Ser Val Pro Val Thr Arg Pro Ala Leu Gly Ser Thr Thr  
100 105 110

Pro Pro Ala His Asp Val Thr Ser Ala Pro Asp Asn Lys Pro Ala Pro  
115 120 125

Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr  
130 135 140

Arg Pro Ala Pro Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser  
145 150 155 160

Ala Pro Asp Asn Arg Pro Ala Leu Gly Ser Thr Ala Pro Pro Val His  
165 170 175

Asn Val Thr Ser Ala Ser Gly Ser Ala Ser Gly Ser Ala Ser Thr Leu  
180 185 190

Val His Asn Gly Thr Ser Ala Arg Ala Thr Thr Thr Pro Ala Ser Lys  
195 200 205

Ser Thr Pro Phe Ser Ile Pro Ser His His Ser Asp Thr Pro Thr Thr  
210 215 220

Leu Ala Ser His Ser Thr Lys Thr Asp Ala Ser Ser Thr His His Ser  
225 230 235 240

Thr Val Pro Pro Leu Thr Ser Ser Asn His Ser Thr Ser Pro Gln Leu  
245 250 255

Ser Thr Gly Val Ser Phe Phe Phe Leu Ser Phe His Ile Ser Asn Leu  
260 265 270

Gln Phe Asn Ser Ser Leu Glu Asp Pro Ser Thr Asp Tyr Tyr Gln Glu  
275 280 285

Leu Gln Arg Asp Ile Ser Glu Met Phe Leu Gln Ile Tyr Lys Gln Gly  
290 295 300

Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe Arg Pro Gly Ser Val Val  
305 310 315 320

Val Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp  
325 330 335

Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr  
340 345 350

Asn Leu Thr Ile Ser Asp Val Ser Val Ser Asp Val Pro Phe Pro Phe  
355 360 365

Ser Ala Gln Ser Gly Ala Gly Val Pro Gly Trp Gly Ile Ala Leu Leu  
370 375 380

Val Leu Val Cys Val Leu Val Ala Leu Ala Ile Val Tyr Leu Ile Ala  
385 390 395 400

Leu Ala Val Cys Gln Cys Arg Arg Lys Asn Tyr Gly Gln Leu Asp Ile  
405 410 415

Phe Pro Ala Arg Asp Thr Tyr His Pro Met Ser Glu Tyr Pro Thr Tyr  
420 425 430

His Thr His Gly Arg Tyr Val Pro Pro Ser Ser Thr Asp Arg Ser Pro  
435 440 445

Tyr Glu Lys Val Ser Ala Gly Asn Gly Gly Ser Ser Leu Ser Tyr Thr  
450 455 460

Asn Pro Ala Val Ala Ala Thr Ser Ala Asn Leu  
465 470 475

<210> 60

<211> 561

<212> PRT

<213> homo sapiens

<400> 60

Met Val Leu Gly Pro Glu Gln Lys Met Ser Asp Asp Ser Val Ser Gly  
1 5 10 15

Asp His Gly Glu Ser Ala Ser Leu Gly Asn Ile Asn Pro Ala Tyr Ser  
20 25 30

Asn Pro Ser Leu Ser Gln Ser Pro Gly Asp Ser Glu Glu Tyr Phe Ala  
35 40 45

Thr Tyr Phe Asn Glu Lys Ile Ser Ile Pro Glu Glu Glu Tyr Ser Cys  
50 55 60

Phe Ser Phe Arg Lys Leu Trp Ala Phe Thr Gly Pro Gly Phe Leu Met  
65 70 75 80

Ser Ile Ala Tyr Leu Asp Pro Gly Asn Ile Glu Ser Asp Leu Gln Ser  
85 90 95

Gly Ala Val Ala Gly Phe Lys Leu Leu Trp Ile Leu Leu Leu Ala Thr  
100 105 110

Leu Val Gly Leu Leu Leu Gln Arg Leu Ala Ala Arg Leu Gly Val Val  
115 120 125

Thr Gly Leu His Leu Ala Glu Val Cys His Arg Gln Tyr Pro Lys Val  
130 135 140

Pro Arg Val Ile Leu Trp Leu Met Val Glu Leu Ala Ile Ile Gly Ser  
145 150 155 160

Asp Met Gln Glu Val Ile Gly Ser Ala Ile Ala Ile Asn Leu Leu Ser  
165 170 175

Val Gly Arg Ile Pro Leu Trp Gly Gly Val Leu Ile Thr Ile Ala Asp  
180 185 190

Thr Phe Val Phe Leu Phe Leu Asp Lys Tyr Gly Leu Arg Lys Leu Glu  
195 200 205

Ala Phe Phe Gly Phe Leu Ile Thr Ile Met Ala Leu Thr Phe Gly Tyr  
210 215 220

Glu Tyr Val Thr Val Lys Pro Ser Gln Ser Gln Val Leu Lys Gly Met  
225 230 235 240

Phe Val Pro Ser Cys Ser Gly Cys Arg Thr Pro Gln Ile Glu Gln Ala  
245 250 255

Val Gly Ile Val Gly Ala Val Ile Met Pro His Asn Met Tyr Leu His  
 260 265 270

Ser Ala Leu Val Lys Ser Arg Gln Val Asn Arg Asn Asn Lys Gln Glu  
 275 280 285

Val Arg Glu Ala Asn Lys Tyr Phe Phe Ile Glu Ser Cys Ile Ala Leu  
 290 295 300

Phe Val Ser Phe Ile Ile Asn Val Phe Val Val Ser Val Phe Ala Glu  
 305 310 315 320

Ala Phe Phe Gly Lys Thr Asn Glu Gln Val Val Glu Val Cys Thr Asn  
 325 330 335

Thr Ser Ser Pro His Ala Gly Leu Phe Pro Lys Asp Asn Ser Thr Leu  
 340 345 350

Ala Val Asp Ile Tyr Lys Gly Gly Val Val Leu Gly Cys Tyr Phe Gly  
 355 360 365

Pro Ala Ala Leu Tyr Ile Trp Ala Val Gly Ile Leu Ala Ala Gly Gln  
 370 375 380

Ser Ser Thr Met Thr Gly Thr Tyr Ser Gly Gln Phe Val Met Glu Gly  
 385 390 395 400

Phe Leu Asn Leu Lys Trp Ser Arg Phe Ala Arg Val Val Leu Thr Arg  
 405 410 415

Ser Ile Ala Ile Ile Pro Thr Leu Leu Val Ala Val Phe Gln Asp Val  
 420 425 430

Glu His Leu Thr Gly Met Asn Asp Phe Leu Asn Val Leu Gln Ser Leu  
 435 440 445

Gln Leu Pro Phe Ala Leu Ile Pro Ile Leu Thr Phe Thr Ser Leu Arg  
 450 455 460

Pro Val Met Ser Asp Phe Ala Asn Gly Leu Gly Trp Arg Ile Ala Gly  
 465 470 475 480

Gly Ile Leu Val Leu Ile Ile Cys Ser Ile Asn Met Tyr Phe Val Val  
 485 490 495

Val Tyr Val Arg Asp Leu Gly His Val Ala Leu Tyr Val Val Ala Ala

500

505

510

Val Val Ser Val Ala Tyr Leu Gly Phe Val Phe Tyr Leu Gly Trp Gln  
 515 520 525

Cys Leu Ile Ala Leu Gly Met Ser Phe Leu Asp Cys Gly His Thr Val  
 530 535 540

Ser Ile Ser Lys Gly Leu Leu Thr Glu Glu Ala Thr Arg Gly Tyr Val  
 545 550 555 560

Lys

&lt;210&gt; 61

&lt;211&gt; 1752

&lt;212&gt; PRT

&lt;213&gt; homo sapiens

&lt;400&gt; 61

Met Ala Gly Pro Arg Pro Ser Pro Trp Ala Arg Leu Leu Leu Ala Ala  
 1 5 10 15

Leu Ile Ser Val Ser Leu Ser Gly Thr Leu Ala Asn Arg Cys Lys Lys  
 20 25 30

Ala Pro Val Lys Ser Cys Thr Glu Cys Val Arg Val Asp Lys Asp Cys  
 35 40 45

Ala Tyr Cys Thr Asp Glu Met Phe Arg Asp Arg Arg Cys Asn Thr Gln  
 50 55 60

Ala Glu Leu Leu Ala Ala Gly Cys Gln Arg Glu Ser Ile Val Val Met  
 65 70 75 80

Glu Ser Ser Phe Gln Ile Thr Glu Glu Thr Gln Ile Asp Thr Thr Leu  
 85 90 95

Arg Arg Ser Gln Met Ser Pro Gln Gly Leu Arg Val Arg Leu Arg Pro  
 100 105 110

Gly Glu Glu Arg His Phe Glu Leu Glu Val Phe Glu Pro Leu Glu Ser  
 115 120 125

Pro Val Asp Leu Tyr Ile Leu Met Asp Phe Ser Asn Ser Met Ser Asp  
 130 135 140

Asp Leu Asp Asn Leu Lys Lys Met Gly Gln Asn Leu Ala Arg Val Leu  
 145 150 155 160

Ser Gln Leu Thr Ser Asp Tyr Thr Ile Gly Phe Gly Lys Phe Val Asp  
 165 170 175

Lys Val Ser Val Pro Gln Thr Asp Met Arg Pro Glu Lys Leu Lys Glu  
 180 185 190

Pro Trp Pro Asn Ser Asp Pro Pro Phe Ser Phe Lys Asn Val Ile Ser  
 195 200 205

Leu Thr Glu Asp Val Asp Glu Phe Arg Asn Lys Leu Gln Gly Glu Arg  
 210 215 220

Ile Ser Gly Asn Leu Asp Ala Pro Glu Gly Gly Phe Asp Ala Ile Leu  
 225 230 235 240

Gln Thr Ala Val Cys Thr Arg Asp Ile Gly Trp Arg Pro Asp Ser Thr  
 245 250 255

His Leu Leu Val Phe Ser Thr Glu Ser Ala Phe His Tyr Glu Ala Asp  
 260 265 270

Gly Ala Asn Val Leu Ala Gly Ile Met Ser Arg Asn Asp Glu Arg Cys  
 275 280 285

His Leu Asp Thr Thr Gly Thr Tyr Thr Gln Tyr Arg Thr Gln Asp Tyr  
 290 295 300

Pro Ser Val Pro Thr Leu Val Arg Leu Leu Ala Lys His Asn Ile Ile  
 305 310 315 320

Pro Ile Phe Ala Val Thr Asn Tyr Ser Tyr Ser Tyr Tyr Glu Lys Leu  
 325 330 335

His Thr Tyr Phe Pro Val Ser Ser Leu Gly Val Leu Gln Glu Asp Ser  
 340 345 350

Ser Asn Ile Val Glu Leu Leu Glu Glu Ala Phe Asn Arg Ile Arg Ser  
 355 360 365



Asn Leu Asp Ile Arg Ala Leu Asp Ser Pro Arg Gly Leu Arg Thr Glu  
 370 375 380

Val Thr Ser Lys Met Phe Gln Lys Thr Arg Thr Gly Ser Phe His Ile  
 385 390 395 400

Arg Arg Gly Glu Val Gly Ile Tyr Gln Val Gln Leu Arg Ala Leu Glu  
 405 410 415

His Val Asp Gly Thr His Val Cys Gln Leu Pro Glu Asp Gln Lys Gly  
 420 425 430

Asn Ile His Leu Lys Pro Ser Phe Ser Asp Gly Leu Lys Met Asp Ala  
 435 440 445

Gly Ile Ile Cys Asp Val Cys Thr Cys Glu Leu Gln Lys Glu Val Arg  
 450 455 460

Ser Ala Arg Cys Ser Phe Asn Gly Asp Phe Val Cys Gly Gln Cys Val  
 465 470 475 480

Cys Ser Glu Gly Trp Ser Gly Gln Thr Cys Asn Cys Ser Thr Gly Ser  
 485 490 495

Leu Ser Asp Ile Gln Pro Cys Leu Arg Glu Gly Glu Asp Lys Pro Cys  
 500 505 510

Ser Gly Arg Gly Glu Cys Gln Cys Gly His Cys Val Cys Tyr Gly Glu  
 515 520 525

Gly Arg Tyr Glu Gly Gln Phe Cys Glu Tyr Asp Asn Phe Gln Cys Pro  
 530 535 540

Arg Thr Ser Gly Phe Leu Cys Asn Asp Arg Gly Arg Cys Ser Met Gly  
 545 550 555 560

Gln Cys Val Cys Glu Pro Gly Trp Thr Gly Pro Ser Cys Asp Cys Pro  
 565 570 575

Leu Ser Asn Ala Thr Cys Ile Asp Ser Asn Gly Gly Ile Cys Asn Gly  
 580 585 590

Arg Gly His Cys Glu Cys Gly Arg Cys His Cys His Gln Gln Ser Leu  
 595 600 605

Tyr Thr Asp Thr Ile Cys Glu Ile Asn Tyr Ser Ala Ile His Pro Gly  
610 615 620

Leu Cys Glu Asp Leu Arg Ser Cys Val Gln Cys Gln Ala Trp Gly Thr  
625 630 635 640

Gly Glu Lys Lys Gly Arg Thr Cys Glu Glu Cys Asn Phe Lys Val Lys  
645 650 655

Met Val Asp Glu Leu Lys Arg Ala Glu Glu Val Val Val Arg Cys Ser  
660 665 670

Phe Arg Asp Glu Asp Asp Asp Cys Thr Tyr Ser Tyr Thr Met Glu Gly  
675 680 685

Asp Gly Ala Pro Gly Pro Asn Ser Thr Val Leu Val His Lys Lys Lys  
690 695 700

Asp Cys Pro Pro Gly Ser Phe Trp Trp Leu Ile Pro Leu Leu Leu Leu  
705 710 715 720

Leu Leu Pro Leu Leu Ala Leu Leu Leu Leu Leu Cys Trp Lys Tyr Cys  
725 730 735

Ala Cys Cys Lys Ala Cys Leu Ala Leu Leu Pro Cys Cys Asn Arg Gly  
740 745 750

His Met Val Gly Phe Lys Glu Asp His Tyr Met Leu Arg Glu Asn Leu  
755 760 765

Met Ala Ser Asp His Leu Asp Thr Pro Met Leu Arg Ser Gly Asn Leu  
770 775 780

Lys Gly Arg Asp Val Val Arg Trp Lys Val Thr Asn Asn Met Gln Arg  
785 790 795 800

Pro Gly Phe Ala Thr His Ala Ala Ser Ile Asn Pro Thr Glu Leu Val  
805 810 815

Pro Tyr Gly Leu Ser Leu Arg Leu Ala Arg Leu Cys Thr Glu Asn Leu  
820 825 830

Leu Lys Pro Asp Thr Arg Glu Cys Ala Gln Leu Arg Gln Glu Val Glu  
835 840 845

Glu Asn Leu Asn Glu Val Tyr Arg Gln Ile Ser Gly Val His Lys Leu

850

855

860

Gln Gln Thr Lys Phe Arg Gln Gln Pro Asn Ala Gly Lys Lys Gln Asp  
 865 870 875 880

His Thr Ile Val Asp Thr Val Leu Met Ala Pro Arg Ser Ala Lys Pro  
 885 890 895

Ala Leu Leu Lys Leu Thr Glu Lys Gln Val Glu Gln Arg Ala Phe His  
 900 905 910

Asp Leu Lys Val Ala Pro Gly Tyr Tyr Thr Leu Thr Ala Asp Gln Asp  
 915 920 925

Ala Arg Gly Met Val Glu Phe Gln Glu Gly Val Glu Leu Val Asp Val  
 930 935 940

Arg Val Pro Leu Phe Ile Arg Pro Glu Asp Asp Asp Glu Lys Gln Leu  
 945 950 955 960

Leu Val Glu Ala Ile Asp Val Pro Ala Gly Thr Ala Thr Leu Gly Arg  
 965 970 975

Arg Leu Val Asn Ile Thr Ile Ile Lys Glu Gln Ala Arg Asp Val Val  
 980 985 990

Ser Phe Glu Gln Pro Glu Phe Ser Val Ser Arg Gly Asp Gln Val Ala  
 995 1000 1005

Arg Ile Pro Val Ile Arg Arg Val Leu Asp Gly Gly Lys Ser Gln  
 1010 1015 1020

Val Ser Tyr Arg Thr Gln Asp Gly Thr Ala Gln Gly Asn Arg Asp  
 1025 1030 1035

Tyr Ile Pro Val Glu Gly Glu Leu Leu Phe Gln Pro Gly Glu Ala  
 1040 1045 1050

Trp Lys Glu Leu Gln Val Lys Leu Leu Glu Leu Gln Glu Val Asp  
 1055 1060 1065

Ser Leu Leu Arg Gly Arg Gln Val Arg Arg Phe His Val Gln Leu  
 1070 1075 1080

Ser Asn Pro Lys Phe Gly Ala His Leu Gly Gln Pro His Ser Thr  
 1085 1090 1095

Thr	Ile	Ile	Ile	Arg	Asp	Pro	Asp	Glu	Leu	Asp	Arg	Ser	Phe	Thr	1100	1105	1110
Ser	Gln	Met	Leu	Ser	Ser	Gln	Pro	Pro	Pro	His	Gly	Asp	Leu	Gly	1115	1120	1125
Ala	Pro	Gln	Asn	Pro	Asn	Ala	Lys	Ala	Ala	Gly	Ser	Arg	Lys	Ile	1130	1135	1140
His	Phe	Asn	Trp	Leu	Pro	Pro	Ser	Gly	Lys	Pro	Met	Gly	Tyr	Arg	1145	1150	1155
Val	Lys	Tyr	Trp	Ile	Gln	Gly	Asp	Ser	Glu	Ser	Glu	Ala	His	Leu	1160	1165	1170
Leu	Asp	Ser	Lys	Val	Pro	Ser	Val	Glu	Leu	Thr	Asn	Leu	Tyr	Pro	1175	1180	1185
Tyr	Cys	Asp	Tyr	Glu	Met	Lys	Val	Cys	Ala	Tyr	Gly	Ala	Gln	Gly	1190	1195	1200
Glu	Gly	Pro	Tyr	Ser	Ser	Leu	Val	Ser	Cys	Arg	Thr	His	Gln	Glu	1205	1210	1215
Val	Pro	Ser	Glu	Pro	Gly	Arg	Leu	Ala	Phe	Asn	Val	Val	Ser	Ser	1220	1225	1230
Thr	Val	Thr	Gln	Leu	Ser	Trp	Ala	Glu	Pro	Ala	Glu	Thr	Asn	Gly	1235	1240	1245
Glu	Ile	Thr	Ala	Tyr	Glu	Val	Cys	Tyr	Gly	Leu	Val	Asn	Asp	Asp	1250	1255	1260
Asn	Arg	Pro	Ile	Gly	Pro	Met	Lys	Lys	Val	Leu	Val	Asp	Asn	Pro	1265	1270	1275
Lys	Asn	Arg	Met	Leu	Leu	Ile	Glu	Asn	Leu	Arg	Glu	Ser	Gln	Pro	1280	1285	1290
Tyr	Arg	Tyr	Thr	Val	Lys	Ala	Arg	Asn	Gly	Ala	Gly	Trp	Gly	Pro	1295	1300	1305
Glu	Arg	Glu	Ala	Ile	Ile	Asn	Leu	Ala	Thr	Gln	Pro	Lys	Arg	Pro	1310	1315	1320

Met Ser Ile Pro Ile Ile Pro Asp Ile Pro Ile Val Asp Ala Gln  
1325 1330 1335

Ser Gly Glu Asp Tyr Asp Ser Phe Leu Met Tyr Ser Asp Asp Val  
1340 1345 1350

Leu Arg Ser Pro Ser Gly Ser Gln Arg Pro Ser Val Ser Asp Asp  
1355 1360 1365

Thr Glu His Leu Val Asn Gly Arg Met Asp Phe Ala Phe Pro Gly  
1370 1375 1380

Ser Thr Asn Ser Leu His Arg Met Thr Thr Thr Ser Ala Ala Ala  
1385 1390 1395

Tyr Gly Thr His Leu Ser Pro His Val Pro His Arg Val Leu Ser  
1400 1405 1410

Thr Ser Ser Thr Leu Thr Arg Asp Tyr Asn Ser Leu Thr Arg Ser  
1415 1420 1425

Glu His Ser His Ser Thr Thr Leu Pro Arg Asp Tyr Ser Thr Leu  
1430 1435 1440

Thr Ser Val Ser Ser His Asp Ser Arg Leu Thr Ala Gly Val Pro  
1445 1450 1455

Asp Thr Pro Thr Arg Leu Val Phe Ser Ala Leu Gly Pro Thr Ser  
1460 1465 1470

Leu Arg Val Ser Trp Gln Glu Pro Arg Cys Glu Arg Pro Leu Gln  
1475 1480 1485

Gly Tyr Ser Val Glu Tyr Gln Leu Leu Asn Gly Gly Glu Leu His  
1490 1495 1500

Arg Leu Asn Ile Pro Asn Pro Ala Gln Thr Ser Val Val Val Glu  
1505 1510 1515

Asp Leu Leu Pro Asn His Ser Tyr Val Phe Arg Val Arg Ala Gln  
1520 1525 1530

Ser Gln Glu Gly Trp Gly Arg Glu Arg Glu Gly Val Ile Thr Ile  
1535 1540 1545

Glu Ser Gln Val His Pro Gln Ser Pro Leu Cys Pro Leu Pro Gly	1550	1555	1560
Ser Ala Phe Thr Leu Ser Thr Pro Ser Ala Pro Gly Pro Leu Val	1565	1570	1575
Phe Thr Ala Leu Ser Pro Asp Ser Leu Gln Leu Ser Trp Glu Arg	1580	1585	1590
Pro Arg Arg Pro Asn Gly Asp Ile Val Gly Tyr Leu Val Thr Cys	1595	1600	1605
Glu Met Ala Gln Gly Gly Gly Pro Ala Thr Ala Phe Arg Val Asp	1610	1615	1620
Gly Asp Ser Pro Glu Ser Arg Leu Thr Val Pro Gly Leu Ser Glu	1625	1630	1635
Asn Val Pro Tyr Lys Phe Lys Val Gln Ala Arg Thr Thr Glu Gly	1640	1645	1650
Phe Gly Pro Glu Arg Glu Gly Ile Ile Thr Ile Glu Ser Gln Asp	1655	1660	1665
Gly Gly Pro Phe Pro Gln Leu Gly Ser Arg Ala Gly Leu Phe Gln	1670	1675	1680
His Pro Leu Gln Ser Glu Tyr Ser Ser Ile Thr Thr Thr His Thr	1685	1690	1695
Ser Ala Thr Glu Pro Phe Leu Val Asp Gly Pro Thr Leu Gly Ala	1700	1705	1710
Gln His Leu Glu Ala Gly Gly Ser Leu Thr Arg His Val Thr Gln	1715	1720	1725
Glu Phe Val Ser Arg Thr Leu Thr Thr Ser Gly Thr Leu Ser Thr	1730	1735	1740
His Met Asp Gln Gln Phe Phe Gln Thr	1745	1750	

<210> 62

<211> 333

<212> PRT

<213> homo sapiens

<400> 62

Met Ala Val Arg Arg Asp Ser Val Trp Lys Tyr Cys Trp Gly Val Leu  
1 5 10 15

Met Val Leu Cys Arg Thr Ala Ile Ser Lys Ser Ile Val Leu Glu Pro  
20 25 30

Ile Tyr Trp Asn Ser Ser Asn Ser Lys Phe Leu Pro Gly Gln Gly Leu  
35 40 45

Val Leu Tyr Pro Gln Ile Gly Asp Lys Leu Asp Ile Ile Cys Pro Lys  
50 55 60

Val Asp Ser Lys Thr Val Gly Gln Tyr Glu Tyr Tyr Lys Val Tyr Met  
65 70 75 80

Val Asp Lys Asp Gln Ala Asp Arg Cys Thr Ile Lys Lys Glu Asn Thr  
85 90 95

Pro Leu Leu Asn Cys Ala Lys Pro Asp Gln Asp Ile Lys Phe Thr Ile  
100 105 110

Lys Phe Gln Glu Phe Ser Pro Asn Leu Trp Gly Leu Glu Phe Gln Lys  
115 120 125

Asn Lys Asp Tyr Tyr Ile Ile Ser Thr Ser Asn Gly Ser Leu Glu Gly  
130 135 140

Leu Asp Asn Gln Glu Gly Gly Val Cys Gln Thr Arg Ala Met Lys Ile  
145 150 155 160

Leu Met Lys Val Gly Gln Asp Ala Ser Ser Ala Gly Ser Thr Arg Asn  
165 170 175

Lys Asp Pro Thr Arg Arg Pro Glu Leu Glu Ala Gly Thr Asn Gly Arg  
180 185 190

Ser Ser Thr Thr Ser Pro Phe Val Lys Pro Asn Pro Gly Ser Ser Thr  
195 200 205

Asp Gly Asn Ser Ala Gly His Ser Gly Asn Asn Ile Leu Gly Ser Glu

210	215	220
Val Ala Leu Phe Ala Gly Ile Ala Ser Gly Cys Ile Ile Phe Ile Val		
225	230	235 240
Ile Ile Ile Thr Leu Val Val Leu Leu Leu Lys Tyr Arg Arg Arg His		
	245	250 255
Arg Lys His Ser Pro Gln His Thr Thr Thr Leu Ser Leu Ser Thr Leu		
	260	265 270
Ala Thr Pro Lys Arg Ser Gly Asn Asn Asn Gly Ser Glu Pro Ser Asp		
	275	280 285
Ile Ile Ile Pro Leu Arg Thr Ala Asp Ser Val Phe Cys Pro His Tyr		
	290	295 300
Glu Lys Val Ser Gly Asp Tyr Gly His Pro Val Tyr Ile Val Gln Glu		
	305	310 315 320
Met Pro Pro Gln Ser Pro Ala Asn Ile Tyr Tyr Lys Val		
	325	330

<210> 63

<211> 245

<212> PRT

<213> homo sapiens

<400> 63

Met Ala Ser Pro Ser Arg Arg Leu Gln Thr Lys Pro Val Ile Thr Cys	
1	5 10 15
Phe Lys Ser Val Leu Leu Ile Tyr Thr Phe Ile Phe Trp Ile Thr Gly	
	20 25 30
Val Ile Leu Leu Ala Val Gly Ile Trp Gly Lys Val Ser Leu Glu Asn	
	35 40 45
Tyr Phe Ser Leu Leu Asn Glu Lys Ala Thr Asn Val Pro Phe Val Leu	
	50 55 60
Ile Ala Thr Gly Thr Val Ile Ile Leu Leu Gly Thr Phe Gly Cys Phe	
65	70 75 80



Ala Thr Cys Arg Ala Ser Ala Trp Met Leu Lys Leu Tyr Ala Met Phe  
85 90 95

Leu Thr Leu Val Phe Leu Val Glu Leu Val Ala Ala Ile Val Gly Phe  
100 105 110

Val Phe Arg His Glu Ile Lys Asn Ser Phe Lys Asn Asn Tyr Glu Lys  
115 120 125

Ala Leu Lys Gln Tyr Asn Ser Thr Gly Asp Tyr Arg Ser His Ala Val  
130 135 140

Asp Lys Ile Gln Asn Thr Leu His Cys Cys Gly Val Thr Asp Tyr Arg  
145 150 155 160

Asp Trp Thr Asp Thr Asn Tyr Tyr Ser Glu Lys Gly Phe Pro Lys Ser  
165 170 175

Cys Cys Lys Leu Glu Asp Cys Thr Pro Gln Arg Asp Ala Asp Lys Val  
180 185 190

Asn Asn Glu Gly Cys Phe Ile Lys Val Met Thr Ile Ile Glu Ser Glu  
195 200 205

Met Gly Val Val Ala Gly Ile Ser Phe Gly Val Ala Cys Phe Gln Leu  
210 215 220

Ile Gly Ile Phe Leu Ala Tyr Cys Leu Ser Arg Ala Ile Thr Asn Asn  
225 230 235 240

Gln Tyr Glu Ile Val  
245

<210> 64

<211> 349

<212> PRT

<213> homo sapiens

<400> 64

Met Gly Pro Ile Ser Ala Pro Ser Cys Arg Trp Arg Ile Pro Trp Gln  
1 5 10 15

Gly Leu Leu Leu Thr Ala Ser Leu Phe Thr Phe Trp Asn Pro Pro Thr  
 20 25 30

Thr Ala Gln Leu Thr Ile Glu Ala Val Pro Ser Asn Ala Ala Glu Gly  
 35 40 45

Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln Asp Pro Arg Gly  
 50 55 60

Tyr Asn Trp Tyr Lys Gly Glu Thr Val Asp Ala Asn Arg Arg Ile Ile  
 65 70 75 80

Gly Tyr Val Ile Ser Asn Gln Gln Ile Thr Pro Gly Pro Ala Tyr Ser  
 85 90 95

Asn Arg Glu Thr Ile Tyr Pro Asn Ala Ser Leu Leu Met Arg Asn Val  
 100 105 110

Thr Arg Asn Asp Thr Gly Ser Tyr Thr Leu Gln Val Ile Lys Leu Asn  
 115 120 125

Leu Met Ser Glu Glu Val Thr Gly Gln Phe Ser Val His Pro Glu Thr  
 130 135 140

Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Asn Pro Val Glu Asp Lys  
 145 150 155 160

Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asn Thr Thr Tyr  
 165 170 175

Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val Ser Pro Arg Leu Gln  
 180 185 190

Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Leu Ser Val Thr Arg Asn  
 195 200 205

Asp Val Gly Pro Tyr Glu Cys Glu Ile Gln Asn Pro Ala Ser Ala Asn  
 210 215 220

Phe Ser Asp Pro Val Thr Leu Asn Val Leu Tyr Gly Pro Asp Ala Pro  
 225 230 235 240

Thr Ile Ser Pro Ser Asp Thr Tyr Tyr His Ala Gly Val Asn Leu Asn  
 245 250 255

Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ser Gln Tyr Ser Trp Ser  
 260 265 270

Val Asn Gly Thr Phe Gln Gln Tyr Thr Gln Lys Leu Phe Ile Pro Asn  
 275 280 285

Ile Thr Thr Lys Asn Ser Gly Ser Tyr Ala Cys His Thr Thr Asn Ser  
 290 295 300

Ala Thr Gly Arg Asn Arg Thr Thr Val Arg Met Ile Thr Val Ser Asp  
 305 310 315 320

Ala Val Val Gln Gly Ser Ser Pro Gly Leu Ser Ala Arg Ala Thr Val  
 325 330 335

Ser Ile Met Ile Gly Val Leu Ala Arg Val Ala Leu Ile  
 340 345

<210> 65

<211> 702

<212> PRT

<213> homo sapiens

<400> 65

Met Glu Ser Pro Ser Ala Pro Pro His Arg Trp Cys Ile Pro Trp Gln  
 1 5 10 15

Arg Leu Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr  
 20 25 30

Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly  
 35 40 45

Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln His Leu Phe Gly  
 50 55 60

Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Ile  
 65 70 75 80

Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser  
 85 90 95

Gly Arg Glu Ile Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Ile

[illegible]

Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg  
 355 360 365

Leu Gln Leu Ser Asn Asp Asn Arg Thr Leu Thr Leu Leu Ser Val Thr  
 370 375 380

Arg Asn Asp Val Gly Pro Tyr Glu Cys Gly Ile Gln Asn Glu Leu Ser  
 385 390 395 400

Val Asp His Ser Asp Pro Val Ile Leu Asn Val Leu Tyr Gly Pro Asp  
 405 410 415

Asp Pro Thr Ile Ser Pro Ser Tyr Thr Tyr Tyr Arg Pro Gly Val Asn  
 420 425 430

Leu Ser Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser  
 435 440 445

Trp Leu Ile Asp Gly Asn Ile Gln Gln His Thr Gln Glu Leu Phe Ile  
 450 455 460

Ser Asn Ile Thr Glu Lys Asn Ser Gly Leu Tyr Thr Cys Gln Ala Asn  
 465 470 475 480

Asn Ser Ala Ser Gly His Ser Arg Thr Thr Val Lys Thr Ile Thr Val  
 485 490 495

Ser Ala Glu Leu Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Lys Pro  
 500 505 510

Val Glu Asp Lys Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Ala Gln  
 515 520 525

Asn Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val Ser  
 530 535 540

Pro Arg Leu Gln Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn  
 545 550 555 560

Val Thr Arg Asn Asp Ala Arg Ala Tyr Val Cys Gly Ile Gln Asn Ser  
 565 570 575

Val Ser Ala Asn Arg Ser Asp Pro Val Thr Leu Asp Val Leu Tyr Gly  
 580 585 590

Pro Asp Thr Pro Ile Ile Ser Pro Pro Asp Ser Ser Tyr Leu Ser Gly  
 595 600 605

Ala Asn Leu Asn Leu Ser Cys His Ser Ala Ser Asn Pro Ser Pro Gln  
 610 615 620

Tyr Ser Trp Arg Ile Asn Gly Ile Pro Gln Gln His Thr Gln Val Leu  
 625 630 635 640

Phe Ile Ala Lys Ile Thr Pro Asn Asn Asn Gly Thr Tyr Ala Cys Phe  
 645 650 655

Val Ser Asn Leu Ala Thr Gly Arg Asn Asn Ser Ile Val Lys Ser Ile  
 660 665 670

Thr Val Ser Ala Ser Gly Thr Ser Pro Gly Leu Ser Ala Gly Ala Thr  
 675 680 685

Val Gly Ile Met Ile Gly Val Leu Val Gly Val Ala Leu Ile  
 690 695 700

<210> 66

<211> 1203

<212> PRT

<213> homo sapiens

<400> 66

Met Asp Leu Arg Asp Phe Tyr Leu Leu Ala Ala Leu Ile Ala Cys Leu  
 1 5 10 15

Arg Leu Asp Ser Ala Ile Ala Gln Glu Leu Ile Tyr Thr Ile Arg Glu  
 20 25 30

Glu Leu Pro Glu Asn Val Pro Ile Gly Asn Ile Pro Lys Asp Leu Asn  
 35 40 45

Ile Ser His Ile Asn Ala Ala Thr Gly Thr Ser Ala Ser Leu Val Tyr  
 50 55 60

Arg Leu Val Ser Lys Ala Gly Asp Ala Pro Leu Val Lys Val Ser Ser  
 65 70 75 80

Ser Thr Gly Glu Ile Phe Thr Thr Ser Asn Arg Ile Asp Arg Glu Lys  
85 90 95

Leu Cys Ala Gly Ala Ser Tyr Ala Glu Glu Asn Glu Cys Phe Phe Glu  
100 105 110

Leu Glu Val Val Ile Leu Pro Asn Asp Phe Phe Arg Leu Ile Lys Ile  
115 120 125

Lys Ile Ile Val Lys Asp Thr Asn Asp Asn Ala Pro Met Phe Pro Ser  
130 135 140

Pro Val Ile Asn Ile Ser Ile Pro Glu Asn Thr Leu Ile Asn Ser Arg  
145 150 155 160

Phe Pro Ile Pro Ser Ala Thr Asp Pro Asp Thr Gly Phe Asn Gly Val  
165 170 175

Gln His Tyr Glu Leu Leu Asn Gly Gln Ser Val Phe Gly Leu Asp Ile  
180 185 190

Val Glu Thr Pro Glu Gly Glu Lys Trp Pro Gln Leu Ile Val Gln Gln  
195 200 205

Asn Leu Asp Arg Glu Gln Lys Asp Thr Tyr Val Met Lys Ile Lys Val  
210 215 220

Glu Asp Gly Gly Thr Pro Gln Lys Ser Ser Thr Ala Ile Leu Gln Val  
225 230 235 240

Thr Val Ser Asp Val Asn Asp Asn Arg Pro Val Phe Lys Glu Gly Gln  
245 250 255

Val Glu Val His Ile Pro Glu Asn Ala Pro Val Gly Thr Ser Val Ile  
260 265 270

Gln Leu His Ala Thr Asp Ala Asp Ile Gly Ser Asn Ala Glu Ile Arg  
275 280 285

Tyr Ile Phe Gly Ala Gln Val Ala Pro Ala Thr Lys Arg Leu Phe Ala  
290 295 300

Leu Asn Asn Thr Thr Gly Leu Ile Thr Val Gln Arg Ser Leu Asp Arg  
305 310 315 320

Glu Glu Thr Ala Ile His Lys Val Thr Val Leu Ala Ser Asp Gly Ser

325

330

335

Ser Thr Pro Ala Arg Ala Thr Val Thr Ile Asn Val Thr Asp Val Asn  
340 345 350

Asp Asn Pro Pro Asn Ile Asp Leu Arg Tyr Ile Ile Ser Pro Ile Asn  
355 360 365

Gly Thr Val Tyr Leu Ser Glu Lys Asp Pro Val Asn Thr Lys Ile Ala  
370 375 380

Leu Ile Thr Val Ser Asp Lys Asp Thr Asp Val Asn Gly Lys Val Ile  
385 390 395 400

Cys Phe Ile Glu Arg Glu Val Pro Phe His Leu Lys Ala Val Tyr Asp  
405 410 415

Asn Gln Tyr Leu Leu Glu Thr Ser Ser Leu Leu Asp Tyr Glu Gly Thr  
420 425 430

Lys Glu Phe Ser Phe Lys Ile Val Ala Ser Asp Ser Gly Lys Pro Ser  
435 440 445

Leu Asn Gln Thr Ala Leu Val Arg Val Lys Leu Glu Asp Glu Asn Asp  
450 455 460

Asn Pro Pro Ile Phe Asn Gln Pro Val Ile Glu Leu Ser Val Ser Glu  
465 470 475 480

Asn Asn Arg Arg Gly Leu Tyr Leu Thr Thr Ile Ser Ala Thr Asp Glu  
485 490 495

Asp Ser Gly Lys Asn Ala Asp Ile Val Tyr Gln Leu Gly Pro Asn Ala  
500 505 510

Ser Phe Phe Asp Leu Asp Arg Lys Thr Gly Val Leu Thr Ala Ser Arg  
515 520 525

Val Phe Asp Arg Glu Glu Gln Glu Arg Phe Ile Phe Thr Val Thr Ala  
530 535 540

Arg Asp Asn Gly Thr Pro Pro Leu Gln Ser Gln Ala Ala Val Ile Val  
545 550 555 560

Thr Val Leu Asp Glu Asn Asp Asn Ser Pro Lys Phe Thr His Asn His  
565 570 575



Phe Gln Phe Phe Val Ser Glu Asn Leu Pro Lys Tyr Ser Thr Val Gly  
580 585 590

Val Ile Thr Val Thr Asp Ala Asp Ala Gly Glu Asn Lys Ala Val Thr  
595 600 605

Leu Ser Ile Leu Asn Asp Asn Asp Asn Phe Val Leu Asp Pro Tyr Ser  
610 615 620

Gly Val Ile Lys Ser Asn Val Ser Phe Asp Arg Glu Gln Gln Ser Ser  
625 630 635 640

Tyr Thr Phe Asp Val Lys Ala Thr Asp Gly Gly Gln Pro Pro Arg Ser  
645 650 655

Ser Thr Ala Lys Val Thr Ile Asn Val Met Asp Val Asn Asp Asn Ser  
660 665 670

Pro Val Val Ile Ser Pro Pro Ser Asn Thr Ser Phe Lys Leu Val Pro  
675 680 685

Leu Ser Ala Ile Pro Gly Ser Val Val Ala Glu Val Phe Ala Val Asp  
690 695 700

Val Asp Thr Gly Met Asn Ala Glu Leu Lys Tyr Thr Ile Val Ser Gly  
705 710 715 720

Asn Asn Lys Gly Leu Phe Arg Ile Asp Pro Val Thr Gly Asn Ile Thr  
725 730 735

Leu Glu Glu Lys Pro Ala Pro Thr Asp Val Gly Leu His Arg Leu Val  
740 745 750

Val Asn Ile Ser Asp Leu Gly Tyr Pro Lys Ser Leu His Thr Leu Val  
755 760 765

Leu Val Phe Leu Tyr Val Asn Asp Thr Ala Gly Asn Ala Ser Tyr Ile  
770 775 780

Tyr Asp Leu Ile Arg Arg Thr Met Glu Thr Pro Leu Asp Arg Asn Ile  
785 790 795 800

Gly Asp Ser Ser Gln Pro Tyr Gln Asn Glu Asp Tyr Leu Thr Ile Met  
805 810 815

Ile Ala Ile Ile Ala Gly Ala Met Val Val Ile Val Val Ile Phe Val  
 820 825 830

Thr Val Leu Val Arg Cys Arg His Ala Ser Arg Phe Lys Ala Ala Gln  
 835 840 845

Arg Ser Lys Gln Gly Ala Glu Trp Met Ser Pro Asn Gln Glu Asn Lys  
 850 855 860

Gln Asn Lys Lys Lys Lys Arg Lys Lys Arg Lys Ser Pro Lys Ser Ser  
 865 870 875 880

Leu Leu Asn Phe Val Thr Ile Glu Glu Ser Lys Pro Asp Asp Ala Val  
 885 890 895

His Glu Pro Ile Asn Gly Thr Ile Ser Leu Pro Ala Glu Leu Glu Glu  
 900 905 910

Gln Ser Ile Gly Arg Phe Asp Trp Gly Pro Ala Pro Pro Thr Thr Phe  
 915 920 925

Lys Pro Asn Ser Pro Asp Leu Ala Lys His Tyr Lys Ser Ala Ser Pro  
 930 935 940

Gln Pro Ala Phe His Leu Lys Pro Asp Thr Pro Val Ser Val Lys Lys  
 945 950 955 960

His His Val Ile Gln Glu Leu Pro Leu Asp Asn Thr Phe Val Gly Gly  
 965 970 975

Cys Asp Thr Leu Ser Lys Arg Ser Ser Thr Ser Ser Asp His Phe Ser  
 980 985 990

Ala Ser Glu Cys Ser Ser Gln Gly Gly Phe Lys Thr Lys Gly Pro Leu  
 995 1000 1005

His Thr Arg Gln Ser Gln Arg Arg Val Thr Phe His Leu Pro Asp  
 1010 1015 1020

Gly Ser Gln Glu Ser Cys Ser Asp Ser Gly Leu Gly Asp His Glu  
 1025 1030 1035

Pro Val Gly Ser Gly Thr Leu Ile Ser His Pro Leu Pro Leu Val  
 1040 1045 1050

Gln Pro Gln Asp Glu Phe Tyr Asp Gln Ala Ser Pro Asp Lys Arg  
1055 1060 1065

Thr Glu Ala Asp Gly Asn Ser Asp Pro Asn Ser Asp Gly Pro Leu  
1070 1075 1080

Gly Pro Arg Gly Leu Ala Glu Ala Thr Glu Met Cys Thr Gln Glu  
1085 1090 1095

Cys Leu Val Leu Gly His Ser Asp Asn Cys Trp Met Pro Pro Gly  
1100 1105 1110

Leu Gly Pro Tyr Gln His Pro Lys Ser Pro Leu Ser Thr Phe Ala  
1115 1120 1125

Pro Gln Lys Glu Trp Val Lys Lys Asp Lys Leu Val Asn Gly His  
1130 1135 1140

Thr Leu Thr Arg Ala Trp Lys Glu Asp Ser Asn Arg Asn Gln Phe  
1145 1150 1155

Asn Asp Arg Lys Gln Tyr Gly Ser Asn Glu Gly His Phe Asn Asn  
1160 1165 1170

Gly Ser His Met Thr Asp Ile Pro Leu Ala Asn Leu Lys Ser Tyr  
1175 1180 1185

Lys Gln Ala Gly Gly Ala Thr Glu Ser Pro Lys Glu His Gln Leu  
1190 1195 1200

<210> 67

<211> 465

<212> PRT

<213> homo sapiens

<400> 67

Met Gly Gly Ala Val Val Asp Glu Gly Pro Thr Gly Val Lys Ala Pro  
1 5 10 15

Asp Gly Gly Trp Gly Trp Ala Val Leu Phe Gly Cys Phe Val Ile Thr  
20 25 30

Gly Phe Ser Tyr Ala Phe Pro Lys Ala Val Ser Val Phe Phe Lys Glu

35

40

45

Leu Ile Gln Glu Phe Gly Ile Gly Tyr Ser Asp Thr Ala Trp Ile Ser  
50 55 60

Ser Ile Leu Leu Ala Met Leu Tyr Gly Thr Gly Pro Leu Cys Ser Val  
65 70 75 80

Cys Val Asn Arg Phe Gly Cys Arg Pro Val Met Leu Val Gly Gly Leu  
85 90 95

Phe Ala Ser Leu Gly Met Val Ala Ala Ser Phe Cys Arg Ser Ile Ile  
100 105 110

Gln Val Tyr Leu Thr Thr Gly Val Ile Thr Gly Leu Gly Leu Ala Leu  
115 120 125

Asn Phe Gln Pro Ser Leu Ile Met Leu Asn Arg Tyr Phe Ser Lys Arg  
130 135 140

Arg Pro Met Ala Asn Gly Leu Ala Ala Ala Gly Ser Pro Val Phe Leu  
145 150 155 160

Cys Ala Leu Ser Pro Leu Gly Gln Leu Leu Gln Asp Arg Tyr Gly Trp  
165 170 175

Arg Gly Gly Phe Leu Ile Leu Gly Gly Leu Leu Leu Asn Cys Cys Val  
180 185 190

Cys Ala Ala Leu Met Arg Pro Leu Val Val Thr Ala Gln Pro Gly Ser  
195 200 205

Gly Pro Pro Arg Pro Ser Arg Arg Leu Leu Asp Leu Ser Val Phe Arg  
210 215 220

Asp Arg Gly Phe Val Leu Tyr Ala Val Ala Ala Ser Val Met Val Leu  
225 230 235 240

Gly Leu Phe Val Pro Pro Val Phe Val Val Ser Tyr Ala Lys Asp Leu  
245 250 255

Gly Val Pro Asp Thr Lys Ala Ala Phe Leu Leu Thr Ile Leu Gly Phe  
260 265 270

Ile Asp Ile Phe Ala Arg Pro Ala Ala Gly Phe Val Ala Gly Leu Gly  
275 280 285

Lys Val Arg Pro Tyr Ser Val Tyr Leu Phe Ser Phe Ser Met Phe Phe  
290 295 300

Asn Gly Leu Ala Asp Leu Ala Gly Ser Thr Ala Gly Asp Tyr Gly Gly  
305 310 315 320

Leu Val Val Phe Cys Ile Phe Phe Gly Ile Ser Tyr Gly Met Val Gly  
325 330 335

Ala Leu Gln Phe Glu Val Leu Met Ala Ile Val Gly Thr His Lys Phe  
340 345 350

Ser Ser Ala Ile Gly Leu Val Leu Leu Met Glu Ala Val Ala Val Leu  
355 360 365

Val Gly Pro Pro Ser Gly Gly Lys Leu Leu Asp Ala Thr His Val Tyr  
370 375 380

Met Tyr Val Phe Ile Leu Ala Gly Ala Glu Val Leu Thr Ser Ser Leu  
385 390 395 400

Ile Leu Leu Leu Gly Asn Phe Phe Cys Ile Arg Lys Lys Pro Lys Glu  
405 410 415

Pro Gln Pro Glu Val Ala Ala Ala Glu Glu Glu Lys Leu His Lys Pro  
420 425 430

Pro Ala Asp Ser Gly Val Asp Leu Arg Glu Val Glu His Phe Leu Lys  
435 440 445

Ala Glu Pro Glu Lys Asn Gly Glu Val Val His Thr Pro Glu Thr Ser  
450 455 460

Val  
465

<210> 68

<211> 314

<212> PRT

<213> homo sapiens

<400> 68

Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala  
 1 5 10 15  
 Ile Pro Val Lys Gln Ala Asp Ser Gly Ser Ser Glu Glu Lys Gln Leu  
 20 25 30  
 Tyr Asn Lys Tyr Pro Asp Ala Val Ala Thr Trp Leu Asn Pro Asp Pro  
 35 40 45  
 Ser Gln Lys Gln Asn Leu Leu Ala Pro Gln Asn Ala Val Ser Ser Glu  
 50 55 60  
 Glu Thr Asn Asp Phe Lys Gln Glu Thr Leu Pro Ser Lys Ser Asn Glu  
 65 70 75 80  
 Ser His Asp His Met Asp Asp Met Asp Asp Glu Asp Asp Asp Asp His  
 85 90 95  
 Val Asp Ser Gln Asp Ser Ile Asp Ser Asn Asp Ser Asp Asp Val Asp  
 100 105 110  
 Asp Thr Asp Asp Ser His Gln Ser Asp Glu Ser His His Ser Asp Glu  
 115 120 125  
 Ser Asp Glu Leu Val Thr Asp Phe Pro Thr Asp Leu Pro Ala Thr Glu  
 130 135 140  
 Val Phe Thr Pro Val Val Pro Thr Val Asp Thr Tyr Asp Gly Arg Gly  
 145 150 155 160  
 Asp Ser Val Val Tyr Gly Leu Arg Ser Lys Ser Lys Lys Phe Arg Arg  
 165 170 175  
 Pro Asp Ile Gln Tyr Pro Asp Ala Thr Asp Glu Asp Ile Thr Ser His  
 180 185 190  
 Met Glu Ser Glu Glu Leu Asn Gly Ala Tyr Lys Ala Ile Pro Val Ala  
 195 200 205  
 Gln Asp Leu Asn Ala Pro Ser Asp Trp Asp Ser Arg Gly Lys Asp Ser  
 210 215 220  
 Tyr Glu Thr Ser Gln Leu Asp Asp Gln Ser Ala Glu Thr His Ser His  
 225 230 235 240

Lys Gln Ser Arg Leu Tyr Lys Arg Lys Ala Asn Asp Glu Ser Asn Glu  
245 250 255

His Ser Asp Val Ile Asp Ser Gln Glu Leu Ser Lys Val Ser Arg Glu  
260 265 270

Phe His Ser His Glu Phe His Ser His Glu Asp Met Leu Val Val Asp  
275 280 285

Pro Lys Ser Lys Glu Glu Asp Lys His Leu Lys Phe Arg Ile Ser His  
290 295 300

Glu Leu Asp Ser Ala Ser Ser Glu Val Asn  
305 310

<210> 69

<211> 702

<212> PRT

<213> homo sapiens

<400> 69

Met Glu Ser Pro Ser Ala Pro Pro His Arg Trp Cys Ile Pro Trp Gln  
1 5 10 15

Arg Leu Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr  
20 25 30

Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly  
35 40 45

Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln His Leu Phe Gly  
50 55 60

Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Ile  
65 70 75 80

Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser  
85 90 95

Gly Arg Glu Ile Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Ile  
100 105 110

Ile Gln Asn Asp Thr Gly Phe Tyr Thr Leu His Val Ile Lys Ser Asp

115		120		125
Leu Val Asn Glu Glu Ala Thr Gly Gln Phe Arg Val Tyr Pro Glu Leu				
130		135		140
Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Lys Pro Val Glu Asp Lys				
145		150		155
Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Ala Thr Tyr				
	165		170	175
Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg Leu Gln				
	180		185	190
Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn Val Thr Arg Asn				
	195		200	205
Asp Thr Ala Ser Tyr Lys Cys Glu Thr Gln Asn Pro Val Ser Ala Arg				
	210		215	220
Arg Ser Asp Ser Val Ile Leu Asn Val Leu Tyr Gly Pro Asp Ala Pro				
	225		230	235
Thr Ile Ser Pro Leu Asn Thr Ser Tyr Arg Ser Gly Glu Asn Leu Asn				
		245	250	255
Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Phe				
	260		265	270
Val Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn				
	275		280	285
Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys Gln Ala His Asn Ser				
	290		295	300
Asp Thr Gly Leu Asn Arg Thr Thr Val Thr Thr Ile Thr Val Tyr Ala				
	305		310	315
Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn Pro Val Glu				
		325	330	335
Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile Gln Asn Thr				
	340		345	350
Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg				
	355		360	365



Leu Gln Leu Ser Asn Asp Asn Arg Thr Leu Thr Leu Leu Ser Val Thr  
 370 375 380

Arg Asn Asp Val Gly Pro Tyr Glu Cys Gly Ile Gln Asn Glu Leu Ser  
 385 390 395 400

Val Asp His Ser Asp Pro Val Ile Leu Asn Val Leu Tyr Gly Pro Asp  
 405 410 415

Asp Pro Thr Ile Ser Pro Ser Tyr Thr Tyr Tyr Arg Pro Gly Val Asn  
 420 425 430

Leu Ser Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser  
 435 440 445

Trp Leu Ile Asp Gly Asn Ile Gln Gln His Thr Gln Glu Leu Phe Ile  
 450 455 460

Ser Asn Ile Thr Glu Lys Asn Ser Gly Leu Tyr Thr Cys Gln Ala Asn  
 465 470 475 480

Asn Ser Ala Ser Gly His Ser Arg Thr Thr Val Lys Thr Ile Thr Val  
 485 490 495

Ser Ala Glu Leu Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Lys Pro  
 500 505 510

Val Glu Asp Lys Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Ala Gln  
 515 520 525

Asn Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val Ser  
 530 535 540

Pro Arg Leu Gln Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn  
 545 550 555 560

Val Thr Arg Asn Asp Ala Arg Ala Tyr Val Cys Gly Ile Gln Asn Ser  
 565 570 575

Val Ser Ala Asn Arg Ser Asp Pro Val Thr Leu Asp Val Leu Tyr Gly  
 580 585 590

Pro Asp Thr Pro Ile Ile Ser Pro Pro Asp Ser Ser Tyr Leu Ser Gly  
 595 600 605

Ala Asn Leu Asn Leu Ser Cys His Ser Ala Ser Asn Pro Ser Pro Gln  
610 615 620

Tyr Ser Trp Arg Ile Asn Gly Ile Pro Gln Gln His Thr Gln Val Leu  
625 630 635 640

Phe Ile Ala Lys Ile Thr Pro Asn Asn Asn Gly Thr Tyr Ala Cys Phe  
645 650 655

Val Ser Asn Leu Ala Thr Gly Arg Asn Asn Ser Ile Val Lys Ser Ile  
660 665 670

Thr Val Ser Ala Ser Gly Thr Ser Pro Gly Leu Ser Ala Gly Ala Thr  
675 680 685

Val Gly Ile Met Ile Gly Val Leu Val Gly Val Ala Leu Ile  
690 695 700

<210> 70

<211> 581

<212> PRT

<213> homo sapiens

<400> 70

Met Glu Thr Arg Gly Ser Arg Leu Thr Gly Gly Gln Gly Arg Val Tyr  
1 5 10 15

Asn Phe Leu Glu Arg Pro Thr Gly Trp Lys Cys Phe Val Tyr His Phe  
20 25 30

Ala Val Phe Leu Ile Val Leu Val Cys Leu Ile Phe Ser Val Leu Ser  
35 40 45

Thr Ile Glu Gln Tyr Ala Ala Leu Ala Thr Gly Thr Leu Phe Trp Met  
50 55 60

Glu Ile Val Leu Val Val Phe Phe Gly Thr Glu Tyr Val Val Arg Leu  
65 70 75 80

Trp Ser Ala Gly Cys Arg Ser Lys Tyr Val Gly Leu Trp Gly Arg Leu  
85 90 95

Arg Phe Ala Arg Lys Pro Ile Ser Ile Ile Asp Leu Ile Val Val Val  
 100 105 110

Ala Ser Met Val Val Leu Cys Val Gly Ser Lys Gly Gln Val Phe Ala  
 115 120 125

Thr Ser Ala Ile Arg Gly Ile Arg Phe Leu Gln Ile Leu Arg Met Leu  
 130 135 140

His Val Asp Arg Gln Gly Gly Thr Trp Arg Leu Leu Gly Ser Val Val  
 145 150 155 160

Phe Ile His Arg Gln Glu Leu Ile Thr Thr Leu Tyr Ile Gly Phe Leu  
 165 170 175

Gly Leu Ile Phe Ser Ser Tyr Phe Val Tyr Leu Ala Glu Lys Asp Ala  
 180 185 190

Val Asn Glu Ser Gly Arg Val Glu Phe Gly Ser Tyr Ala Asp Ala Leu  
 195 200 205

Trp Trp Gly Val Val Thr Val Thr Thr Ile Gly Tyr Gly Asp Lys Val  
 210 215 220

Pro Gln Thr Trp Val Gly Lys Thr Ile Ala Ser Cys Phe Ser Val Phe  
 225 230 235 240

Ala Ile Ser Phe Phe Ala Leu Pro Ala Gly Ile Leu Gly Ser Gly Phe  
 245 250 255

Ala Leu Lys Val Gln Gln Lys Gln Arg Gln Lys His Phe Asn Arg Gln  
 260 265 270

Ile Pro Ala Ala Ala Ser Leu Ile Gln Thr Ala Trp Arg Cys Tyr Ala  
 275 280 285

Ala Glu Asn Pro Asp Ser Ser Thr Trp Lys Ile Tyr Ile Arg Lys Ala  
 290 295 300

Pro Arg Ser His Thr Leu Leu Ser Pro Ser Pro Lys Pro Lys Lys Ser  
 305 310 315 320

Val Val Val Lys Lys Lys Lys Phe Lys Leu Asp Lys Asp Asn Gly Val  
 325 330 335

Thr Pro Gly Glu Lys Met Leu Thr Val Pro His Ile Thr Cys Asp Pro

340

345

350

Pro Glu Glu Arg Arg Leu Asp His Phe Ser Val Asp Gly Tyr Asp Ser  
 355 360 365

Ser Val Arg Lys Ser Pro Thr Leu Leu Glu Val Ser Met Pro His Phe  
 370 375 380

Met Arg Thr Asn Ser Phe Ala Glu Asp Leu Asp Leu Glu Gly Glu Thr  
 385 390 395 400

Leu Leu Thr Pro Ile Thr His Ile Ser Gln Leu Arg Glu His His Arg  
 405 410 415

Ala Thr Ile Lys Val Ile Arg Arg Met Gln Tyr Phe Val Ala Lys Lys  
 420 425 430

Lys Phe Gln Gln Ala Arg Lys Pro Tyr Asp Val Arg Asp Val Ile Glu  
 435 440 445

Gln Tyr Ser Gln Gly His Leu Asn Leu Met Val Arg Ile Lys Glu Leu  
 450 455 460

Gln Arg Arg Leu Asp Gln Ser Ile Gly Lys Pro Ser Leu Phe Ile Ser  
 465 470 475 480

Val Ser Glu Lys Ser Lys Asp Arg Gly Ser Asn Thr Ile Gly Ala Arg  
 485 490 495

Leu Asn Arg Val Glu Asp Lys Val Thr Gln Leu Asp Gln Arg Leu Ala  
 500 505 510

Leu Ile Thr Asp Met Leu His Gln Leu Leu Ser Leu His Gly Gly Ser  
 515 520 525

Thr Pro Gly Ser Gly Gly Pro Pro Arg Glu Gly Gly Ala His Ile Thr  
 530 535 540

Gln Pro Cys Gly Ser Gly Gly Ser Val Asp Pro Glu Leu Phe Leu Pro  
 545 550 555 560

Ser Asn Thr Leu Pro Thr Tyr Glu Gln Leu Thr Val Pro Arg Arg Gly  
 565 570 575

Pro Asp Glu Gly Ser  
 580

<210> 71

<211> 699

<212> PRT

<213> homo sapiens

<400> 71

Met Asp Lys Phe Trp Trp His Ala Ala Trp Gly Leu Cys Leu Val Pro  
1 5 10 15

Leu Ser Leu Ala Gln Ile Asp Leu Asn Ile Thr Cys Arg Phe Ala Gly  
20 25 30

Val Phe His Val Glu Lys Asn Gly Arg Tyr Ser Ile Ser Arg Thr Glu  
35 40 45

Ala Ala Asp Leu Cys Lys Ala Phe Asn Ser Thr Leu Pro Thr Met Ala  
50 55 60

Gln Met Glu Lys Ala Leu Ser Ile Gly Phe Glu Thr Cys Arg Tyr Gly  
65 70 75 80

Phe Ile Glu Gly His Val Val Ile Pro Arg Ile His Pro Asn Ser Ile  
85 90 95

Cys Ala Ala Asn Asn Thr Gly Val Tyr Ile Leu Thr Ser Asn Thr Ser  
100 105 110

Gln Tyr Asp Thr Tyr Cys Phe Asn Ala Ser Ala Pro Pro Glu Glu Asp  
115 120 125

Cys Thr Ser Val Thr Asp Leu Pro Asn Ala Phe Asp Gly Pro Ile Thr  
130 135 140

Ile Thr Ile Val Asn Arg Asp Gly Thr Arg Tyr Val Gln Lys Gly Glu  
145 150 155 160

Tyr Arg Thr Asn Pro Glu Asp Ile Tyr Pro Ser Asn Pro Thr Asp Asp  
165 170 175

Asp Val Ser Ser Gly Ser Ser Ser Glu Arg Ser Ser Thr Ser Gly Gly  
180 185 190

Tyr Ile Phe Tyr Thr Phe Ser Thr Val His Pro Ile Pro Asp Glu Asp  
 195 200 205

Ser Pro Trp Ile Thr Asp Ser Thr Asp Arg Ile Pro Ala Thr Ser Thr  
 210 215 220

Ser Ser Asn Thr Ile Ser Ala Gly Trp Glu Pro Asn Glu Glu Asn Glu  
 225 230 235 240

Asp Glu Arg Asp Arg His Leu Ser Phe Ser Gly Ser Gly Ile Asp Asp  
 245 250 255

Asp Glu Asp Phe Ile Ser Ser Thr Ile Ser Thr Thr Pro Arg Ala Phe  
 260 265 270

Asp His Thr Lys Gln Asn Gln Asp Trp Thr Gln Trp Asn Pro Ser His  
 275 280 285

Ser Asn Pro Glu Val Leu Leu Gln Thr Thr Thr Arg Met Thr Asp Val  
 290 295 300

Asp Arg Asn Gly Thr Thr Ala Tyr Glu Gly Asn Trp Asn Pro Glu Ala  
 305 310 315 320

His Pro Pro Leu Ile His His Glu His His Glu Glu Glu Glu Thr Pro  
 325 330 335

His Ser Thr Ser Thr Ile Gln Ala Thr Pro Ser Ser Thr Thr Glu Glu  
 340 345 350

Thr Ala Thr Gln Lys Glu Gln Trp Phe Gly Asn Arg Trp His Val Gly  
 355 360 365

Tyr Arg Gln Thr Pro Lys Glu Asp Ser His Ser Thr Thr Gly Thr Ala  
 370 375 380

Ala Ala Ser Ala His Thr Ser His Pro Met Gln Gly Arg Thr Thr Pro  
 385 390 395 400

Ser Pro Glu Asp Ser Ser Trp Thr Asp Phe Phe Asn Pro Ile Ser His  
 405 410 415

Pro Met Gly Arg Gly His Gln Ala Gly Arg Arg Met Asp Met Asp Ser  
 420 425 430

Ser His Ser Thr Thr Leu Gln Pro Thr Ala Asn Pro Asn Thr Gly Leu  
 435 440 445

Val Glu Asp Leu Asp Arg Thr Gly Pro Leu Ser Met Thr Thr Gln Gln  
 450 455 460

Ser Asn Ser Gln Ser Phe Ser Thr Ser His Glu Gly Leu Glu Glu Asp  
 465 470 475 480

Lys Asp His Pro Thr Thr Ser Thr Leu Thr Ser Ser Asn Arg Asn Asp  
 485 490 495

Val Thr Gly Gly Arg Arg Asp Pro Asn His Ser Glu Gly Ser Thr Thr  
 500 505 510

Leu Leu Glu Gly Tyr Thr Ser His Tyr Pro His Thr Lys Glu Ser Arg  
 515 520 525

Thr Phe Ile Pro Val Thr Ser Ala Lys Thr Gly Ser Phe Gly Val Thr  
 530 535 540

Ala Val Thr Val Gly Asp Ser Asn Ser Asn Val Asn Arg Ser Leu Ser  
 545 550 555 560

Gly Asp Gln Asp Thr Phe His Pro Ser Gly Gly Ser His Thr Thr His  
 565 570 575

Gly Ser Glu Ser Asp Gly His Ser His Gly Ser Gln Glu Gly Gly Ala  
 580 585 590

Asn Thr Thr Ser Gly Pro Ile Arg Thr Pro Gln Ile Pro Glu Trp Leu  
 595 600 605

Ile Ile Leu Ala Ser Leu Leu Ala Leu Ala Leu Ile Leu Ala Val Cys  
 610 615 620

Ile Ala Val Asn Ser Arg Arg Arg Cys Gly Gln Lys Lys Lys Leu Val  
 625 630 635 640

Ile Asn Ser Gly Asn Gly Ala Val Glu Asp Arg Lys Pro Ser Gly Leu  
 645 650 655

Asn Gly Glu Ala Ser Lys Ser Gln Glu Met Val His Leu Val Asn Lys  
 660 665 670

Glu Ser Ser Glu Thr Pro Asp Gln Phe Met Thr Ala Asp Glu Thr Arg

675

680

685

Asn Leu Gln Asn Val Asp Met Lys Ile Gly Val  
690 695

&lt;210&gt; 72

&lt;211&gt; 377

&lt;212&gt; PRT

&lt;213&gt; homo sapiens

&lt;400&gt; 72

Met Glu Pro Pro Gly Arg Arg Glu Cys Pro Phe Pro Ser Trp Arg Phe  
1 5 10 15

Pro Gly Leu Leu Leu Ala Ala Met Val Leu Leu Leu Tyr Ser Phe Ser  
20 25 30

Asp Ala Cys Glu Glu Pro Pro Thr Phe Glu Ala Met Glu Leu Ile Gly  
35 40 45

Lys Pro Lys Pro Tyr Tyr Glu Ile Gly Glu Arg Val Asp Tyr Lys Cys  
50 55 60

Lys Lys Gly Tyr Phe Tyr Ile Pro Pro Leu Ala Thr His Thr Ile Cys  
65 70 75 80

Asp Arg Asn His Thr Trp Leu Pro Val Ser Asp Asp Ala Cys Tyr Arg  
85 90 95

Glu Thr Cys Pro Tyr Ile Arg Asp Pro Leu Asn Gly Gln Ala Val Pro  
100 105 110

Ala Asn Gly Thr Tyr Glu Phe Gly Tyr Gln Met His Phe Ile Cys Asn  
115 120 125

Glu Gly Tyr Tyr Leu Ile Gly Glu Glu Ile Leu Tyr Cys Glu Leu Lys  
130 135 140

Gly Ser Val Ala Ile Trp Ser Gly Lys Pro Pro Ile Cys Glu Lys Val  
145 150 155 160

Leu Cys Thr Pro Pro Pro Lys Ile Lys Asn Gly Lys His Thr Phe Ser  
165 170 175



Glu Val Glu Val Phe Glu Tyr Leu Asp Ala Val Thr Tyr Ser Cys Asp  
180 185 190

Pro Ala Pro Gly Pro Asp Pro Phe Ser Leu Ile Gly Glu Ser Thr Ile  
195 200 205

Tyr Cys Gly Asp Asn Ser Val Trp Ser Arg Ala Ala Pro Glu Cys Lys  
210 215 220

Val Val Lys Cys Arg Phe Pro Val Val Glu Asn Gly Lys Gln Ile Ser  
225 230 235 240

Gly Phe Gly Lys Lys Phe Tyr Tyr Lys Ala Thr Val Met Phe Glu Cys  
245 250 255

Asp Lys Gly Phe Tyr Leu Asp Gly Ser Asp Thr Ile Val Cys Asp Ser  
260 265 270

Asn Ser Thr Trp Asp Pro Pro Val Pro Lys Cys Leu Lys Val Ser Thr  
275 280 285

Ser Ser Thr Thr Lys Ser Pro Ala Ser Ser Ala Ser Gly Pro Arg Pro  
290 295 300

Thr Tyr Lys Pro Pro Val Ser Asn Tyr Pro Gly Tyr Pro Lys Pro Glu  
305 310 315 320

Glu Gly Ile Leu Asp Ser Leu Asp Val Trp Val Ile Ala Val Ile Val  
325 330 335

Ile Ala Ile Val Val Gly Val Ala Val Ile Cys Val Val Pro Tyr Arg  
340 345 350

Tyr Leu Gln Arg Arg Lys Lys Lys Gly Thr Tyr Leu Thr Asp Glu Thr  
355 360 365

His Arg Glu Val Lys Phe Thr Ser Leu  
370 375

<210> 73

<211> 619

<212> PRT

<213> homo sapiens

<400> 73

Met Ala Thr Lys Glu Lys Leu Gln Cys Leu Lys Asp Phe His Lys Asp  
1 5 10 15

Met Val Lys Pro Ser Pro Gly Lys Ser Pro Gly Thr Arg Pro Glu Asp  
20 25 30

Glu Ala Glu Gly Lys Pro Pro Gln Arg Glu Lys Trp Ser Ser Lys Ile  
35 40 45

Asp Phe Val Leu Ser Val Ala Gly Gly Phe Val Gly Leu Gly Asn Val  
50 55 60

Trp Arg Phe Pro Tyr Leu Cys Tyr Lys Asn Gly Gly Gly Ala Phe Leu  
65 70 75 80

Ile Pro Tyr Phe Ile Phe Leu Phe Gly Ser Gly Leu Pro Val Phe Phe  
85 90 95

Leu Glu Ile Ile Ile Gly Gln Tyr Thr Ser Glu Gly Gly Ile Thr Cys  
100 105 110

Trp Glu Lys Ile Cys Pro Leu Phe Ser Gly Ile Gly Tyr Ala Ser Val  
115 120 125

Val Ile Val Ser Leu Leu Asn Val Tyr Tyr Ile Val Ile Leu Ala Trp  
130 135 140

Ala Thr Tyr Tyr Leu Phe Gln Ser Phe Gln Lys Glu Leu Pro Trp Ala  
145 150 155 160

His Cys Asn His Ser Trp Asn Thr Pro His Cys Met Glu Asp Thr Met  
165 170 175

Arg Lys Asn Lys Ser Val Trp Ile Thr Ile Ser Ser Thr Asn Phe Thr  
180 185 190

Ser Pro Val Ile Glu Phe Trp Glu Arg Asn Val Leu Ser Leu Ser Pro  
195 200 205

Gly Ile Asp His Pro Gly Ser Leu Lys Trp Asp Leu Ala Leu Cys Leu  
210 215 220

Leu Leu Val Trp Leu Val Cys Phe Phe Cys Ile Cys Lys Gly Val Arg  
 225 230 235 240

Ser Thr Gly Lys Val Val Tyr Phe Thr Ala Thr Phe Pro Phe Ala Met  
 245 250 255

Leu Leu Val Leu Leu Val Arg Gly Leu Thr Leu Pro Gly Ala Gly Arg  
 260 265 270

Gly Ile Lys Phe Tyr Leu Tyr Pro Asp Ile Thr Arg Leu Glu Asp Pro  
 275 280 285

Gln Val Trp Ile Asp Ala Gly Thr Gln Ile Phe Phe Ser Tyr Ala Ile  
 290 295 300

Cys Leu Gly Ala Met Thr Ser Leu Gly Ser Tyr Asn Lys Tyr Lys Tyr  
 305 310 315 320

Asn Ser Tyr Arg Asp Cys Met Leu Leu Gly Cys Leu Asn Ser Gly Thr  
 325 330 335

Ser Phe Val Ser Gly Phe Ala Ile Phe Ser Ile Leu Gly Phe Met Ala  
 340 345 350

Gln Glu Gln Gly Val Asp Ile Ala Asp Val Ala Glu Ser Gly Pro Gly  
 355 360 365

Leu Ala Phe Ile Ala Tyr Pro Lys Ala Val Thr Met Met Pro Leu Pro  
 370 375 380

Thr Phe Trp Ser Ile Leu Phe Phe Ile Met Leu Leu Leu Leu Gly Leu  
 385 390 395 400

Asp Ser Gln Phe Val Glu Val Glu Gly Gln Ile Thr Ser Leu Val Asp  
 405 410 415

Leu Tyr Pro Ser Phe Leu Arg Lys Gly Tyr Arg Arg Glu Ile Phe Ile  
 420 425 430

Ala Phe Val Cys Ser Ile Ser Tyr Leu Leu Gly Leu Thr Met Val Thr  
 435 440 445

Glu Gly Gly Met Tyr Val Phe Gln Leu Phe Asp Tyr Tyr Ala Ala Ser  
 450 455 460

Gly Val Cys Leu Leu Trp Val Ala Phe Phe Glu Cys Phe Val Ile Ala  
 465 470 475 480

Trp Ile Tyr Gly Gly Asp Asn Leu Tyr Asp Gly Ile Glu Asp Met Ile  
 485 490 495

Gly Tyr Arg Pro Gly Pro Trp Met Lys Tyr Ser Trp Val Ile Thr Pro  
 500 505 510

Val Leu Cys Val Gly Cys Phe Ile Phe Ser Leu Val Lys Tyr Val Pro  
 515 520 525

Leu Thr Tyr Asn Lys Thr Tyr Val Ser Pro Thr Trp Ala Ile Gly Leu  
 530 535 540

Gly Trp Ser Leu Ala Leu Ser Ser Met Leu Cys Val Pro Leu Val Ile  
 545 550 555 560

Val Ile Arg Leu Cys Gln Thr Glu Gly Pro Phe Leu Val Arg Val Lys  
 565 570 575

Tyr Leu Leu Thr Pro Arg Glu Pro Asn Arg Trp Ala Val Glu Arg Glu  
 580 585 590

Gly Ala Thr Pro Tyr Asn Ser Arg Thr Val Met Asn Gly Ala Leu Val  
 595 600 605

Lys Pro Thr His Ile Ile Val Glu Thr Met Met  
 610 615

<210> 74

<211> 99

<212> PRT

<213> homo sapiens

<400> 74

Met Ala Lys Val Glu Gln Val Leu Ser Leu Glu Pro Gln His Glu Leu  
 1 5 10 15

Lys Phe Arg Gly Pro Phe Thr Asp Val Val Thr Thr Asn Leu Lys Leu  
 20 25 30

Gly Asn Pro Thr Asp Arg Asn Val Cys Phe Lys Val Lys Thr Thr Ala

35

40

45

Pro Arg Arg Tyr Cys Val Arg Pro Asn Ser Gly Ile Ile Asp Ala Gly  
50 55 60

Ala Ser Ile Asn Val Ser Gly Arg Arg Trp Thr Ala Asp Glu Glu Asp  
65 70 75 80

Ser Ala Glu Gln Gln Pro His Phe Ser Ile Ser Pro Asn Trp Glu Gly  
85 90 95

Arg Arg Pro

<210> 75

<211> 836

<212> PRT

<213> homo sapiens

<400> 75

Met Ile Pro Phe Leu Pro Met Phe Ser Leu Leu Leu Leu Leu Ile Val  
1 5 10 15

Asn Pro Ile Asn Ala Asn Asn His Tyr Asp Lys Ile Leu Ala His Ser  
20 25 30

Arg Ile Arg Gly Arg Asp Gln Gly Pro Asn Val Cys Ala Leu Gln Gln  
35 40 45

Ile Leu Gly Thr Lys Lys Lys Tyr Phe Ser Thr Cys Lys Asn Trp Tyr  
50 55 60

Lys Lys Ser Ile Cys Gly Gln Lys Thr Thr Val Leu Tyr Glu Cys Cys  
65 70 75 80

Pro Gly Tyr Met Arg Met Glu Gly Met Lys Gly Cys Pro Ala Val Leu  
85 90 95

Pro Ile Asp His Val Tyr Gly Thr Leu Gly Ile Val Gly Ala Thr Thr  
100 105 110

Thr Gln Arg Tyr Ser Asp Ala Ser Lys Leu Arg Glu Glu Ile Glu Gly  
115 120 125

Lys Gly Ser Phe Thr Tyr Phe Ala Pro Ser Asn Glu Ala Trp Asp Asn  
 130 135 140

Leu Asp Ser Asp Ile Arg Arg Gly Leu Glu Ser Asn Val Asn Val Glu  
 145 150 155 160

Leu Leu Asn Ala Leu His Ser His Met Ile Asn Lys Arg Met Leu Thr  
 165 170 175

Lys Asp Leu Lys Asn Gly Met Ile Ile Pro Ser Met Tyr Asn Asn Leu  
 180 185 190

Gly Leu Phe Ile Asn His Tyr Pro Asn Gly Val Val Thr Val Asn Cys  
 195 200 205

Ala Arg Ile Ile His Gly Asn Gln Ile Ala Thr Asn Gly Val Val His  
 210 215 220

Val Ile Asp Arg Val Leu Thr Gln Ile Gly Thr Ser Ile Gln Asp Phe  
 225 230 235 240

Ile Glu Ala Glu Asp Asp Leu Ser Ser Phe Arg Ala Ala Ala Ile Thr  
 245 250 255

Ser Asp Ile Leu Glu Ala Leu Gly Arg Asp Gly His Phe Thr Leu Phe  
 260 265 270

Ala Pro Thr Asn Glu Ala Phe Glu Lys Leu Pro Arg Gly Val Leu Glu  
 275 280 285

Arg Phe Met Gly Asp Lys Val Ala Ser Glu Ala Leu Met Lys Tyr His  
 290 295 300

Ile Leu Asn Thr Leu Gln Cys Ser Glu Ser Ile Met Gly Gly Ala Val  
 305 310 315 320

Phe Glu Thr Leu Glu Gly Asn Thr Ile Glu Ile Gly Cys Asp Gly Asp  
 325 330 335

Ser Ile Thr Val Asn Gly Ile Lys Met Val Asn Lys Lys Asp Ile Val  
 340 345 350

Thr Asn Asn Gly Val Ile His Leu Ile Asp Gln Val Leu Ile Pro Asp  
 355 360 365

Ser Ala Lys Gln Val Ile Glu Leu Ala Gly Lys Gln Gln Thr Thr Phe  
 370 375 380

Thr Asp Leu Val Ala Gln Leu Gly Leu Ala Ser Ala Leu Arg Pro Asp  
 385 390 395 400

Gly Glu Tyr Thr Leu Leu Ala Pro Val Asn Asn Ala Phe Ser Asp Asp  
 405 410 415

Thr Leu Ser Met Val Gln Arg Leu Leu Lys Leu Ile Leu Gln Asn His  
 420 425 430

Ile Leu Lys Val Lys Val Gly Leu Asn Glu Leu Tyr Asn Gly Gln Ile  
 435 440 445

Leu Glu Thr Ile Gly Gly Lys Gln Leu Arg Val Phe Val Tyr Arg Thr  
 450 455 460

Ala Val Cys Ile Glu Asn Ser Cys Met Glu Lys Gly Ser Lys Gln Gly  
 465 470 475 480

Arg Asn Gly Ala Ile His Ile Phe Arg Glu Ile Ile Lys Pro Ala Glu  
 485 490 495

Lys Ser Leu His Glu Lys Leu Lys Gln Asp Lys Arg Phe Ser Thr Phe  
 500 505 510

Leu Ser Leu Leu Glu Ala Ala Asp Leu Lys Glu Leu Leu Thr Gln Pro  
 515 520 525

Gly Asp Trp Thr Leu Phe Val Pro Thr Asn Asp Ala Phe Lys Gly Met  
 530 535 540

Thr Ser Glu Glu Lys Glu Ile Leu Ile Arg Asp Lys Asn Ala Leu Gln  
 545 550 555 560

Asn Ile Ile Leu Tyr His Leu Thr Pro Gly Val Phe Ile Gly Lys Gly  
 565 570 575

Phe Glu Pro Gly Val Thr Asn Ile Leu Lys Thr Thr Gln Gly Ser Lys  
 580 585 590

Ile Phe Leu Lys Glu Val Asn Asp Thr Leu Leu Val Asn Glu Leu Lys  
 595 600 605

Ser Lys Glu Ser Asp Ile Met Thr Thr Asn Gly Val Ile His Val Val  
610 615 620

Asp Lys Leu Leu Tyr Pro Ala Asp Thr Pro Val Gly Asn Asp Gln Leu  
625 630 635 640

Leu Glu Ile Leu Asn Lys Leu Ile Lys Tyr Ile Gln Ile Lys Phe Val  
645 650 655

Arg Gly Ser Thr Phe Lys Glu Ile Pro Val Thr Val Tyr Thr Thr Lys  
660 665 670

Ile Ile Thr Lys Val Val Glu Pro Lys Ile Lys Val Ile Glu Gly Ser  
675 680 685

Leu Gln Pro Ile Ile Lys Thr Glu Gly Pro Thr Leu Thr Lys Val Lys  
690 695 700

Ile Glu Gly Glu Pro Glu Phe Arg Leu Ile Lys Glu Gly Glu Thr Ile  
705 710 715 720

Thr Glu Val Ile His Gly Glu Pro Ile Ile Lys Lys Tyr Thr Lys Ile  
725 730 735

Ile Asp Gly Val Pro Val Glu Ile Thr Glu Lys Glu Thr Arg Glu Glu  
740 745 750

Arg Ile Ile Thr Gly Pro Glu Ile Lys Tyr Thr Arg Ile Ser Thr Gly  
755 760 765

Gly Gly Glu Thr Glu Glu Thr Leu Lys Lys Leu Leu Gln Glu Glu Val  
770 775 780

Thr Lys Val Thr Lys Phe Ile Glu Gly Gly Asp Gly His Leu Phe Glu  
785 790 795 800

Asp Glu Glu Ile Lys Arg Leu Leu Gln Gly Asp Thr Pro Val Arg Lys  
805 810 815

Leu Gln Ala Asn Lys Lys Val Gln Gly Ser Arg Arg Arg Leu Arg Glu  
820 825 830

Gly Arg Ser Gln  
835



<210> 76

<211> 430

<212> PRT

<213> homo sapiens

<400> 76

Met Ser Phe Thr Thr Arg Ser Thr Phe Ser Thr Asn Tyr Arg Ser Leu  
1 5 10 15

Gly Ser Val Gln Ala Pro Ser Tyr Gly Ala Arg Pro Val Ser Ser Ala  
20 25 30

Ala Ser Val Tyr Ala Gly Ala Gly Gly Ser Gly Ser Arg Ile Ser Val  
35 40 45

Ser Arg Ser Thr Ser Phe Arg Gly Gly Met Gly Ser Gly Gly Leu Ala  
50 55 60

Thr Gly Ile Ala Gly Gly Leu Ala Gly Met Gly Gly Ile Gln Asn Glu  
65 70 75 80

Lys Glu Thr Met Gln Ser Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp  
85 90 95

Arg Val Arg Ser Leu Glu Thr Glu Asn Arg Arg Leu Glu Ser Lys Ile  
100 105 110

Arg Glu His Leu Glu Lys Lys Gly Pro Gln Val Arg Asp Trp Ser His  
115 120 125

Tyr Phe Lys Ile Ile Glu Asp Leu Arg Ala Gln Ile Phe Ala Asn Thr  
130 135 140

Val Asp Asn Ala Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu Ala  
145 150 155 160

Ala Asp Asp Phe Arg Val Lys Tyr Glu Thr Glu Leu Ala Met Arg Gln  
165 170 175

Ser Val Glu Asn Asp Ile His Gly Leu Arg Lys Val Ile Asp Asp Thr  
180 185 190

Asn Ile Thr Arg Leu Gln Leu Glu Thr Glu Ile Glu Ala Leu Lys Glu

195

200

205

Glu Leu Leu Phe Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu  
210 215 220

Gln Ala Gln Ile Ala Ser Ser Gly Leu Thr Val Glu Val Asp Ala Pro  
225 230 235 240

Lys Ser Gln Asp Leu Ala Lys Ile Met Ala Asp Ile Arg Ala Gln Tyr  
245 250 255

Asp Glu Leu Ala Arg Lys Asn Arg Glu Glu Leu Asp Lys Tyr Trp Ser  
260 265 270

Gln Gln Ile Glu Glu Ser Thr Thr Val Val Thr Thr Gln Ser Ala Glu  
275 280 285

Val Gly Ala Ala Glu Thr Thr Leu Thr Glu Leu Arg Arg Thr Val Gln  
290 295 300

Ser Leu Glu Ile Asp Leu Asp Ser Met Arg Asn Leu Lys Ala Ser Leu  
305 310 315 320

Glu Asn Ser Leu Arg Glu Val Glu Ala Arg Tyr Ala Leu Gln Met Glu  
325 330 335

Gln Leu Asn Gly Ile Leu Leu His Leu Glu Ser Glu Leu Ala Gln Thr  
340 345 350

Arg Ala Glu Gly Gln Arg Gln Ala Gln Glu Tyr Glu Ala Leu Leu Asn  
355 360 365

Ile Lys Val Lys Leu Glu Ala Glu Ile Ala Thr Tyr Arg Arg Leu Leu  
370 375 380

Glu Asp Gly Glu Asp Phe Asn Leu Gly Asp Ala Leu Asp Ser Ser Asn  
385 390 395 400

Ser Met Gln Thr Ile Gln Lys Thr Thr Thr Arg Arg Ile Val Asp Gly  
405 410 415

Lys Val Val Ser Glu Thr Asn Asp Thr Lys Val Leu Arg His  
420 425 430

&lt;210&gt; 77

<211> 466  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (457)..(457)  
 <223> n=unknown

<220>  
 <221> misc\_feature  
 <222> (95)..(95)  
 <223> n=unknown

<400> 77  
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 gtcacctttg actacagagg ttgggggtgac tcagtgggaa cgccatctga gcgggggcatg 120  
 acctatgacg cactccacgt ttttgactgg atcaaagcaa gaagtgggtga caaccccgtg 180  
 tacatctggg gccactctct gggcactggc gtggcgacaa atctgggtgcg gcgcctctgt 240  
 gagcgagaga cgccctccaga tgcccttata ttggaatctc cattcactaa tatccgtgaa 300  
 gaagctaaga gccatccatt ttcagtgata tatcgatact tccctggggtt tgactgggttc 360  
 ttccttgatt ctattacaag tagtggaatt aaattgcaaa tgatgaaaac gtgaagcaca 420  
 tctcctgtcc cctgctcacc tgcacgctga agacganccg gtgggtg 466

<210> 78  
 <211> 255  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature

<222> (104)..(247)

<223> n=unknown

<220>

<221> misc\_feature

<222> (222)..(228)

<223> n=unknown

<400> 78

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gcacatggta tggtttatct agagttacag actttgtaag gtttgcagct cagggcagtt      60
cttcaccggt ggcaaaagtt gaatccggcg agggctggga attnacctgc cctccacttt      120
cagctgcctt tgggttagtt ttagttttgt ctgctgntct tcgatgaccg tgtcacctgt      180
tggnttcagt cacaccagct ctgaccacat gcngggatnn gggctggaan ntgggccctg      240
ctgaggntct agtat                                     255
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<210> 79

<211> 380

<212> DNA

<213> homo sapiens

<400> 79

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cctgtcccaa aatatttggc ctggtcactg tagaagatga gcaggcgtgg atggcatctt      60
ataaatatgt aggtgctacc actaatatcc atccatattt gtccacaatg atcaactacg      120
cccagcctgt aaagtttcaa ggtttccatg tggcagaaga acgcaatatt cattataaca      180
tgtcttcttt taatgaatca gtcggtcttg gctacttgaa gacacatgca attgaatttg      240
tcaattataa caaacggcaa atgagtcgca tttaccccaa gggaggccga gtcgattcca      300
gtaattacat gcctcagatt ttctggaacg ctggctgcca gatggtttca ctgaactatc      360
aaaccccaga tttagcgatg                                     380
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<210> 80

<211> 474

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (245)..(461)

<223> n=unknown

<220>

<221> misc\_feature

<222> (40)..(260)

<223> n=unknown

<400> 80  
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ttatcaatgg ttggactctg ccttactgga atagtaaatt tttgtggatt tgtagctatt 120  
tttgtttggc caaggaaatg caatactcaa gctgttaaatt agaagtcagt cagacattcc 180  
aagtctctct ggtttcagat atcatcttgt ttacacataa aggaaacaaa ataaacagct 240  
ttcanccagg gagtttgtgt ccagaanttt gngagngant ctttngannc ttnggggggtt 300  
ngcngcnca gtttgcattt nggagnttca tacnactgtt gctggctctgc ggnccatctc 360  
ggcttccaat ttcaccatct gctgcattct cttcgcttg cgtttgggac actgcatgac 420  
aggatttcaa aagctgctca ttctgtttcc ccaggaattc nagatgttca agct 474

<210> 81

<211> 346

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (181)..(182)

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<221> misc\_feature

<222> (348)..(405)

<223> n=unknown

<220>

<221> misc\_feature

<222> (257)..(257)

<223> n=unknown

<400> 81  
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ctcagtaaatt atttatgtat tgagtaaaat ttaataatca tttgttgaaa ttaaaaagtg 180  
nntaaataag ttacctagaa agatgcaaag tccacaaacc tggggcactt gcattttccc 240  
tgagcgtaat gtttgcncat caggatgtga ggaccagtct cctctcatg tctgagggg 300  
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<210> 82

<211> 352

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (8)..(345)

<223> n=unknown

<400> 82  
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accgcgtcag gatgcaggca gatccctgca gaagtgtcta aaattcacac tcctcttctg	180
gagggacntc gatggtatta ggatagaagc accaggggac cccacgaacg gtggcgtcga	240
aacagcagcc cgttactttc acacgtggag ggcgtnacac caggaaaacc acaagtneng	300
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<210> 83

<211> 535

<212> DNA

<213> homo sapiens

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taccctaata ctctctcca aaagtaacca gtttcaagtg tcttgactc acaggaaaac	180
aattttttat tttttatcag caaatttgta ctttaaaaat ttcacattaa tagaatcaga	240
ctatatatac tcttctgtac cttgcttttt ttgctacctg tgttttatga gatctttctg	300
tatcagtata tataaaaata cctcattatt tttagcggct gtgtggtatt ctaatgtttg	360
aatgtgttac aaatgttcaa aactgatag gctctttagg ttgtttccaa tattaaatca	420
cattgtggtg aatatacttg tacatataat gagtttttat tctacagtgt acctagcaat	480
acaattgctg gatcagaggg tattttttat tttcagttca gtagttactg ccaaa	535

<210> 84

<211> 402

<212> DNA

<213> homo sapiens

<400> 84	
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agtggccgta gcaacttggc ggagacaggc tatgagtctg acgttagagt ggttgcttcc	120
ttagcctttc aggatggagg aatgtgggca gtttgacttc agcactgaaa acctctccac	180
ctgggccagg gttgcctcag aggccaaagt tccagaagcc tcttacctgc cgtaaaatgc	240
tcaacctgt gtctggggcc tgggcctgct gtgactgacc tacagtggac tttctctctg	300
gaatggaacc ttcttaggcc tcctggtgca acttaatttt tttttttaat gctatcttca	360

aaacgtaga gaaagttctt caaaagtgc gccagaagt gc

402

<210> 85

<211> 479

<212> DNA

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<222> (334)..(334)

<223> n=unknown

<400> 85

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gaggcattgg ggtctggaaa ccagaaatgc aggacggcca gtgggcccag cagctctggg	180
ctgcactttt gaagaacttt ctctaacggt ttgaagatag cattaataaa aaaaattaag	240
ttgcaccagg aggcctaaga aggttcatt ccagagagaa agtccactgt aggtcagtca	300
cagcaggccc aggcccagga cacagggttg agcnttttac ggcaggtaag aggcttctgg	360
aaacttggcc tctgaggcaa ccctggccca ggtggagagg ttttcagtgc tgaagtcaaa	420
ctgcccacat tctccatcc tgaaaggcta aggaagcaag cacttctaac gtcagactc	479

<210> 86

<211> 344

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (139)..(139)

<223> n=unknown



<220>

<221> misc\_feature

<222> (365)..(365)

<223> n=unknown

<400> 86

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attcctgcta ctgcaaagtg aattttataa aggcaaaata ctggagcact aatgccccatg 180

agattgaagg cacagtgttt gacaggagtg gaaaagcggg tcatcggctg tttgggaaat 240

ggcatgaaag catctactgt ggcggcggct cctcttctgc ctgtgtatgg agagcaaadc 300

ctatgccgaa aggtacgagc aatactatag cttcacacag ttg 344

<210> 87

<211> 509

<212> DNA

<213> homo sapiens

<220>

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<222> (211)..(212)

<223> n=unknown

<220>

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<223> n=unknown

<220>

<221> misc\_feature

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ccgaaaggta caaggacgca cttgtaaaga tgattaaaac gtatctttcc tttatgtgac	300
gcgtctctag tgccttactg aagaagcagt gacactcccg tcgctcggtg aggacgttcc	360
cggacagtgc ctcatcactg ggactgggat ccctcccagg gtccaccaag ggctcctgct	420
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<210> 89

<211> 474

<212> DNA

<213> homo sapiens

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<223> n=unknown

<220>

<221> misc\_feature

<222> (448)..(448)

<223> n=unknown

<220>

<221> misc\_feature

<222> (465)..(465)

<223> n=unknown

<400> 89

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ctgtggattg gcatccaaat acagagtctt acgcagcggg gacgtgggtg cgcgccccgc	120
atgccacgaa aagcttacat aagtttaact tgaacagagc ttgggaaatg gggctgcaaa	180
ggagagcagt tcccacgcca ggaaccaacg tgaaagcact ggaatcagca caacagccat	240

ggaatcaggc aggcagggga ggacgggctg tgccttctg agctctatag tacagcaaga	300
tttcaagcag tttccagaaa aacaaacaac aacgacattt tctttcctta tcgacgggnt	360
attttatggg tctggaagct tcgtgttgca catagggaaa aaaatttctc tgaaacgtac	420
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<210> 90

<211> 455

<212> DNA

<213> homo sapiens

<220>

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<222> (443)..(443)

<223> n=unknown

<400> 90

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ggagcgatgt gacgccactc acctttactg aggtgcacga gggccgtgct gacatcatga	180
tcgacttcgc caggtactgg catggggacg acctgccgtt tgatgggcct gggggcatcc	240
tggcccatgc cttcttcccc aagactcacc gagaagggga tgtccacttc gactatgatg	300

agacctggac tatcggggat gaccagggca cagacctgct gcaggtggca gcccatgaat 360  
 ttggccacgt gctggggctg cagcacacaa cagcagccaa ggccctgatg tccgntteta 420  
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<210> 91

<211> 455

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (5)..(354)

<223> n=unknown

<400> 91

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 gccgcccaca gctagacctc cggcgaagag gcacgcagtc catgctgctg gcacaagtca 180  
 cttggccagc tcttcagcca ccgctttgcg catcttgtcc ttgaggtagg cgcctttctg 240  
 ccattcagac ttgagttcca gccactcata gaatgggacg tccactatca ggaagcctgc 300  
 agccactatg tgtcgccggg ccagaacaaa gcgaccagc aagtccttgc ttcggctggt 360  
 gaagttgggg aactcccacc gcaagaacgc tagcctctta gaccctggag gtgggtgact 420  
 ggctcccagt tggttgggca aagtgaggtg ccaca 455

<210> 92

<211> 257

<212> DNA

<213> homo sapiens

<400> 92

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 aattgagaat tttgatttct taaagtgtgt ttctttctaa attgctgttc ctttaatttga 120  
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<222> (464)..(464)

<223> n=unknown

<400> 87

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agaaacgcac tgaggaaaat atagacttaa agagttacaa tgctaagcta agcacaagtg      120
atcatcctag aggatctttt aaatatataa acacagggtt gtgccacttc agaaggcaag      180
cacaggagaa atacactaat gttatctttc nncctttactt tttcaccata agacaggatg      240
gtccagtttg gaaaaaccaa gatcttttct aagttccaaa taggtgccgt tgctcacca      300
agagtcacgc tcggatttcc tgaaaaaccg aggctgggtgc tccacatgat tttcttctaa      360
gacccgccgc ctttctctct gcagttgttc aatcctctgc ttttgtattt cagcttcttc      420
taagttccct tcctctagaa acctctggtc tggcctaaat cgangtgtca gtaggtggca      480
ataaagactt tgatgatgga ttccatttc      509
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<210> 88

<211> 479

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (471)..(471)

<223> n=unknown

<220>

<221> misc\_feature

<222> (39)..(42)

<223> n=unknown

<400> 88

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tgctttacga aggtggcagc tgacagacgt gggctctgca tgccgccagc ctagtagaaa      120
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aattactaat taatcacaaa tgtgaagtta tgcattgatgt aaaaaatata aacattctaa 240  
ttaaaggctt tgcaaca 257

<210> 93

<211> 288

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (113)..(113)

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<222> (210)..(210)

<223> n=unknown

<220>

<221> misc\_feature

<222> (266)..(266)

<223> n=unknown

<400> 93

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tgcatgttac ctctataaaa cttagtgcgg acaagtttta atccagaatt gancttttga      120
cttaaagcag ggggactttg tatagaaggt ttgggggctg tggggaagga gagtccctg      180
aaggtctgac acgtctgcct acccattcgn ggtgatcaat taaatgtagg tatgaataag      240
ttcgaagctc cgtgagtga ccatcnttat aaacgtgatg atcagctg      288
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<210> 94

<211> 462

<212> DNA

<213> homo sapiens

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<223> n=unknown

<220>

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<222> (238)..(395)

<223> n=unknown

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<221> misc\_feature

<222> (502)..(535)

<223> n=unknown

<400> 94

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gaaagtctaa aatttcaaga acattcaaag agctaacaca gtaaagggtca tgcaagttct 120  
 agaatagtga atcatgacag aactcattca ttttatacctt tacctccaaa aggcctcatct 180  
 ccttaacgag aagacatctc aagaccagga gcttgtcact agtctgatat ttcattcagg 240  
 aatattgagc ctgttagcac gtactggctt gataggaagt aactcaaccc taactgtaga 300  
 aaaggggttt ctgaagagac tcaactgctgc aaaatgcatg ccctgtattc atattgtgtt 360  
 atacgatgaa catgccacat gctttcattt aagtacgtgt gcgtaacacc cgaaccagga 420  
 atctcagcta tgaccttttc acttagctac gctaaatgtc ag 462

<210> 95

<211> 231

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

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<222> (418)..(517)

<223> n=unknown

<400> 95

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 tgattttata acagggcggn tggttaattc tcacacagtn taaaanatca gcccctaatt 180  
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<210> 96

<211> 520

<212> DNA



<213> homo sapiens

<220>

<221> misc\_feature

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<222> (322)..(322)

<223> n=unknown

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<222> (460)..(460)

<223> n=unknown

<220>

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<222> (408)..(431)

<223> n=unknown

<400> 96

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agacaaatat tctacacggc atattgcaca ggatggatgg caaaaaaag tttaaaaaca 180

aaaaccctta acggaactgc cttaaaaagg cagacgtcct agtgccctgtc atgttatatt	240
aaacatacat acacacaatc tttttgctta ttataatata gacttaaatag tacaanaatg	300
ttttccactt ttttcaattt ttaaacacaa cagctataaa cctgaacaca tatgctatca	360
tcatgccata agactaaaac aattatatat agcgacaagt agaaaggntt aaatagtcaa	420
atacnagaat naaaaacgca gtaccatagt gtcgcgaact caaatcggca tttagataga	480
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<210> 97

<211> 552

<212> DNA

<213> homo sapiens

<220>

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<223> n=unknown

<220>

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<222> (342)..(342)

<223> n=unknown

<400> 97

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gtttctccag gcgactttga acccattttt tggcagtgtt catattatta aactagtcaa	120
aaatgctaaa ataatttggg agaaaatatt tttaagtag tgttatagtt tcatgtttat	180
cttttattat gttttgtgaa gttgtgtcct ttcactaatt acctatacta tgccaatatt	240
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acactttata aggtaaaaat gaggtttcca agatttaata atctgatcaa gttcttgtaa	360
tttccaaata gaatggactt ggtctgttaa gggctaagga gaagaggaag ataagggttaa	420
aagttgttaa tgaccaaaaca ttctaaaaga aatgccaaaa aaaagtttat tttccaagnc	480
cttcgaacta tttaaggnaa gccaaatcat ttcctaaatg gcatatcctt tgtggggatt	540

tcccattaat an

552

<210> 98

<211> 524

<212> DNA

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<400> 98

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atatatatgc tattcagaga aactcaaadc cccgaattct cctgtggcat gttttatatc	180
agacatttaa aatctgttta ccaagaaaga ccaggatttt aactatatgt aggtttctgc	240
ttacagttgc aaactatcag aagcctgtct atatgataga gccagataa acctgagatt	300
tagaaaagca agtcatttat tctcctgagg ctgttttagt ggcacttttg tgacaagaat	360
gacctccta atgctttact acacaactta accagatcta tcagtcatga taaattagac	420
ccagtccatc tttcaatcca gtctactctg gttctgaaca tataaacaca aaacactaca	480
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<210> 99

<211> 175

<212> DNA

<213> homo sapiens

<220>

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<222> (162)..(174)

<223> n=unknown

<400> 99  
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cttaatctat ggggtgtagt tagctactgt aaatttgatg cncatanntt tccng 175

<210> 100

<211> 63

<212> DNA

<213> homo sapiens

<220>

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<222> (56)..(63)

<223> n=unknown

<220>

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<222> (49)..(49)

<223> n=unknown

<400> 100  
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<210> 101

<211> 494

<212> DNA

<213> homo sapiens

<220>

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<222> (384)..(384)

<223> n=unknown

<220>

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<222> (380)..(380)

<223> n=unknown

<400> 101

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gaggccatca tcacctggca cccagccaag aggccatgtc atcccatcat cctgacatcc 480
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<211> 159

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (60)..(151)

<223> n=unknown

<400> 102

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ttggacatat ttttnanttt agaagatgat gtntgtaact tacaagcaaa gaaggaaact 120
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cttaagagag agcaagcaca antntaaca ngctattaa

159

<210> 103

<211> 452

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (14)..(442)

<223> n=unknown

<220>

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<222> (362)..(440)

<223> n=unknown

<400> 103

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aaaattctgt gaaggaagtc ctcagagcac ctngtaccat caaagacaga atcaagaagt 180

tgcttgctca caaaaacagc atganaaaga aggcaaaaat taaaaatggt accccagAAC 240

ccaccaggac tcttaccctt aaggtgaact tgcagccctt caactatgaa gagatagttt 300

ccagaggcgg gaactctcat ggaggtaaaa aagggaatga agagaaaatg aaagaggggc 360

ttgaggatga gaaaagagaa gagaaagccc tgaagaatga catagaggag cgaanctgcg 420

aggagatgtg tttttcccta angtgatgaa gc 452

<210> 104

<211> 443

<212> DNA

<213> homo sapiens

<220>

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<222> (53)..(439)

<223> n=unknown

<220>

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<222> (282)..(339)

<223> n=unknown

<400> 104

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acctgctcct gctgctcgcn ctgtgcggtg caggcaccac cgccgcggan tcagttacag 120

cttgcggtggc aactggagca tctgcaatgg gaacggctcg ctggagctgc ccggggcggt 180

ccctggctgc gtgcacagcg ccttggtcca gcagggcctg atccaggatt cttactacag 240

atttaatgac cttaactaca gatgggtctc tttggataac tggacctata gcaaagaatt 300

taaaatcccc tttgaaatta gcaaattggca aaaagtaaatt ttgattcttg agggagtgga 360

tacggtttca aaaatcctgg ttcaatgaag tcactattgg ggaaacagac aatatgttca 420

atagntatag ctttgatant aac 443

<210> 105

<211> 521

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (337)..(441)

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<222> (95)..(95)

<223> n=unknown

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<222> (216)..(216)

<223> n=unknown

<220>

<221> misc\_feature

<222> (502)..(502)

<223> n=unknown

<400> 105

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gaccaacatc accattgcaa tagagaaaga agaatgtcgt ttctgcataa gcatcaacac 180

cacttggtgt gctggctact gctacaccag ggatctggtg tataaggacc cagccaggcc 240

caaaatccag aaaacatgta ccttcaagga actggtatac gaaacagtga gagtgcccg 300

ctgtgctcac catgcagatt ccttgatac ataccnctg gccaccagt gtcactgtgg 360

caagtgtgac agcgacacac tgattgtact gtgcgaggcc tggggcccag ctactgtcc 420

tttggtgaaa tgaaaganta nagatcagtg gacatttcag ggccacatac ccttgtcctg 480

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<210> 106

<211> 492

<212> DNA

<213> homo sapiens

<220>



<221> misc\_feature

<222> (294)..(465)

<223> n=unknown

<220>

<221> misc\_feature

<222> (420)..(597)

<223> n=unknown

<400> 106

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ctatttattt atacaaatat atttgtagac aaattaatta tatttattaa attgctgaaa      180
ctgctttcaa acctactttc aaatcctttg tcattccaaa gaagtggatc ctaggaggagg      240
tagggtgaga tagtttggtt tttcccttt atctcaaaaa ggagttttgc agnggcctag      300
tagcatgtga tcaatttggt gaagtaatga atagaggcag gctaatttcc acagcnccaa      360
attacaattt cntgcctttg cccttaactn acangcttgg tagtantage ttggaaatct      420
tgagctctgt tantcccat ctgtancaaa caattcagaa agatncatca tgtctcaata      480
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<210> 107

<211> 418

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (310)..(310)

<223> n=unknown

<220>

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<222> (99)..(171)

<223> n=unknown

<220>

<221> misc\_feature

<222> (296)..(330)

<223> n=unknown

<400> 107

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tctctcctga ctgagaactt gctttatact aagctgctcc caaggagca cggctctaac	180
attcttctct actgtctaag gcaatggata acaattgggg gaaacaatag actagccaaa	240
aaacttgga gcaaagtcta gggaatgaca tgctgtaggg aataaggtct ttgaaaagg	300
cctacatgtn cttaagattt tagaagaaca ttcacatgtc cagggtgtg cacacactca	360
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<210> 108

<211> 398

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (56)..(56)

<223> n=unknown

<400> 108

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aaactacaaa cttttacca ggaatggcct gtttctcat ttaaccggcc ctttcccaat	120
tcgcctaag actttggggg tggctctctt gtaattaatc tgtgttgga aagaatgtct	180

ggaacatgga cttggcggtc agtaacctgt aacagagcta caactaggaa aattagagtg 240  
 gtagtagtca cttattttaag aattcattca ggtaaacagc tgcaccctct gtaccacctta 300  
 agtggcaaag aagctgttat agtcttctga aaattatcac tatgagtgtg ataattctga 360  
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<210> 109

<211> 372

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (264)..(364)

<223> n=unknown

<400> 109

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 gtcttcctaa ttaaaaatac cacttaaaaa agtgaggcag caaaagcatg aactggagtc 180  
 agtgggtctgt ctgggttaaa attggcccca cgatttacta cctatgactt caagcaagtt 240  
 gcttaacctc gcacttcac ccanttcatt atctcatttg tgnaatagag gtaaataatt 300  
 aaccngtac tcacagggaa taccgagatt atgcatgtaa agtgcttacg agtgccctag 360  
 cacntagtaa gt 372

<210> 110

<211> 533

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (2)..(2)

<223> n=unknown

<220>

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<222> (176)..(176)

<223> n=unknown

<220>

<221> misc\_feature

<222> (258)..(258)

<223> n=unknown

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<222> (438)..(438)

<223> n=unknown

<400> 110

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cagattatct	aggaaatata	tcagcaaagg	attttttgtt	atgcttatct	cttganacaa	180
aatatttatt	gtacagatta	tacattgtga	tttttttgtt	actgagtata	ttgtttgtgc	240
ccagaaaaat	ctaaaaanat	gtgggttgac	ttctaagaga	tttaagaaca	agtcacctct	300
agtttttaag	acagttccct	tgatatttac	ctatccagta	ccatctcata	agaataactg	360
cctgtaagta	tcagaaagtt	gagaaatgct	ggtaatgtga	cataaacttc	tcactgttct	420
tcactgagat	aggactgnct	tatcttggtta	ttgataaatt	atttaatttc	tcctgaataa	480
ttagcataat	ctcatgtgat	acagaaacat	cttaattagc	aaataaattt	ata	533

<210> 111

<211> 491

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (375)..(484)

<223> n=unknown

<400> 111

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agattatgct aattattcag gagaaattaa ataatttatc aataacaaga taagcagtcc      120
tatctcagtg aagaacagtg agaagtttat gtcacattac cagcatttct caactttctg      180
atacttacag gcagttattc ttatgagatg gtactggata ggtaaataatc aagggaactg      240
tcttaaaaac tagaggtgac ttgttcttaa atctcttaga agtcaaccca catcttttta      300
gatttttctg ggcacaaaca atatactcag taacaaaaaa atcacaatgt ataatctgta      360
caataaatat tttgnttcaa gagataagca taacaaaaaa tcctttgctg atatatttcc      420
taaataatct gtataatgna agctacaaaa caaatcggtt ctctgggtccc acctaatgct      480
atcncattaa t                                                                491
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<210> 112

<211> 503

<212> DNA

<213> homo sapiens

<400> 112

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gaacagtatc ttcaaggcac agcagacagt actaaacaac tcaactcggt caaacctaac      60
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ttttgtaatc ttataaacac cttctccagt ggggaagaaa tagcccaaat ggggaatttta      180
ggtaacctag acttcggctg ccaactgtgc ctaatatacct agtaatgtta acctttccag      240
taccagtatc agaatacccc tacaactggg cattttaaac aggcaaaca gtattacaca      300
cacttaattt tgttcattcc agccacatga agtcaaagga tgtttctcta taagaaacta      360
caatagatct ttgaaacttt gcatgaagtt gttttagggg ccatacttca agtgacagga      420
aataacaaat agcatacaca cacatttcat taagtggggg cttataaaat ctctagaacc      480
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ctgagaagtt ccttgctact tat

503

<210> 113

<211> 338

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (71)..(71)

<223> n=unknown

<400> 113

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aggtctctgt natggctact cagcactacc acggtagtgt gaaagcatca atagataata	120
tgtaaataaa tgagtataat tgtgttccag taaaactatt taaaaatact taccatgggc	180
tggatttggc ctgtggccat agtttgcctc gtctgctcta tagtattctg ttacatgcat	240
gtaccataac ttagccattt tattgtcagc attcaaattt tttccagtaa gagtatgtgc	300
atagaaaaaa attgtgtatt tcactttaaa tatactat	338

<210> 114

<211> 436

<212> DNA

<213> homo sapiens

<400> 114

aagtaagctt ggtgattata tttagtggag ttacttgaaa taggtcattt agtttacata	60
cagtttaatt ctcatgccac aattaataag gtatcacatg actgcaaaat aactgcagc	120
aaactttcta gcatctgata ttggataagg atagcttggt ctagaagttg gagattaatc	180
tggctctgtg actggcagca ttagagactg tatctgatgg ttggtgtgag gatgttggtg	240
acagttctga aagttagcca tcaattcctg tgcagggtgg agtcagaccc agtgacttcc	300
ttttcaatgt cagcaagagt tttctcatgc ctgctttggg cactttctct tggaaacttc	360
acgcatttga cttgcagctt cttgaccgga ggaatcaact gagctcccag tgctggctac	420

cttggggcaa aataaa

436

<210> 115

<211> 539

<212> DNA

<213> homo sapiens

<400> 115

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tcagacaaga ttctgtaaca tcatgtaaag cttttttgta cattcttggt gttaacctcc	120
tggcttctct tcacacacat cttctaaaaa agaaggatgt gaaagaacta ggtcagtcta	180
tgactttgca atatgtgtta tatagtatgc atttatcttg tatatcagta atttgatggt	240
tatgagagat gaatccatga gggaaatggag ctatcagaac tctaattgttc caggatatca	300
ttctatgccc cacactgagc actggggaac tgggggacta gagtcaaaaa tataaatttg	360
cccagactct aatgttattc tattttttct tctgttgaac ttaccaggct attgtaagac	420
tcttgatagt tgaaactgct tatttttcct cctgtaattt taactaattg taaaatgatg	480
tggcatttta tgttttaatg agaatgggcg attcatttaa aaaagcttgt ttagaatat	539

<210> 116

<211> 340

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (15)..(332)

<223> n=unknown

<400> 116

tacaaacaat aggangctta acgaaaaaat aaaaggtaaa aanaaaaaag aaaaagaaaa	60
acaagtattc ttaactactg aaaagtaaac agcctttttt aaaaaagact tcaacataaa	120
aatgcgaaaa ngtagttgtc atctctaadc caaatacatt cctagagnaa aggatcntcc	180

atggtgacag ggtnacttac agctgtatnc ttatttaa	gctattcnta	ttccttttna	240
gttattttctt cnttgcaaat tcaattggag atctgtgcaa	ntctngcaaa	atattcnttg	300
gattanaaaa actntataaa aaantgatca cnacctgcaa			340

<210> 117

<211> 289

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (230)..(230)

<223> n=unknown

<400> 117	
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ttatttgttt tacaAAAAAG gaataagtaa ttataaatt	aagaagttac ctataaaaat 120
aaaaagataa caaccctatc atatagctta tttttaaatt	acctgaaaaa cgatattcta 180
cactgtttcc tttttgactc tgagttttca aactgttact	tctcccatan ttctcaatcc 240
atttcactca gttgcacagt cttttaaacc ctgtaattgt	cataccaaa 289

<210> 118

<211> 591

<212> DNA

<213> homo sapiens

<400> 118	
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tacaatattt ggagagtagg tgaagaaaat atagaacaga	acatgaacat tttaaaatga 180
tattccaccc aagctttatc tttttgctaa atcttgtgga	cactagaata tatattcaag 240
atgttggttaa agatattcag caagccatac ttcaaagatg	ttaaaacagc cctccaccaa 300
taatatggca ttgcaaacc	ttctatccca tcccttttca gttaaaagag
	agaatattaa 360



cagagattta gtaatagtga ccaaaataag aaatcagtat agtcaagaaa gatatgtaat 420  
tattcaacat catttggtac ggatagatca atgcaactca ctaagtggac aacattgtga 480  
ggggagtggg taacatgatt cagagtcctg tgggtaaatt catatgcaat aatcttattc 540  
ccaatcaatc tgtaaagtaa aagcactaca tccacattaa cattataaca t 591

<210> 119

<211> 402

<212> DNA

<213> homo sapiens

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<221> misc\_feature

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<222> (388)..(388)

<223> n=unknown

<400> 119

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taccagcaga ttattgagaa agacaagcgt canaaciaag tgctagaaaa ctgcagggtg 180  
gaacaagagc ccagtcagag cgaattcgga catataattt caccaggat agagtcagtg 240  
accacaggat agcatatgaa gttcgtgata ttaaggaatt tttatgtggg ggggaagggcc 300  
tggatcagct aattcagaga ctgcttcaat cagcagatga agaagccatg ctgaactttt 360  
ggatgaacac cttaaatacag caaaatanat actaacttat ta 402

<210> 120

<211> 143

<212> DNA

<213> homo sapiens

<400> 120

ggaattcata cagcaatcaa agggctttac tgtctgtacc cagatgctca ttgttattga 60  
atgactcata ttcttcataa tttttattta aaagttgcag tctaagtctt aactttaaca 120  
tgattaacag tattatgggtt ttt 143

<210> 121

<211> 444

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (408)..(429)

<223> n=unknown

<400> 121

gcagaccaat gaggagagaaa ctgccccatt ttgaagggtga ggaaattgag gttctgggta 60  
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accaccacaa aattagattt atagactcaa aatgaaaaca tcagcttact ggtttgtagt 180  
tcataccagt catacattcc aaaacatggt ttgagtcctta ctctgtgcct gaccttggtgc 240  
ttgataacag ggatataatg ggaagcaaca ctccagtggc cagatgctca cagtcttatg 300  
gaggagccca aataatatct ggggaagtta aagtccatat aatgactgga taagagtaca 360  
atacaggtgc catggggaca cgtgaccatc acttgaagac tgcttggnag ggccgcgcgt 420  
gtgtcatgnc tatacgataa acat 444

<210> 122

<211> 413

<212> DNA

<213> homo sapiens

<400> 122  
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tagggactgc tttttaaaac ttactttact ccataatctt aaaataactca tacagttcca 180  
cagtcacatt tacactaaca aggcataattt gaagtccagc tttcatcctt gatcctgcta 240  
ctctaggctc tcctttctcc taaagataag catttttcatt atgtatcatg tttatcgat 300  
aggcatgaac acacgcgcgg ccccttccag gcagtcttca gtgatgtcac gtgttcccat 360  
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<210> 123

<211> 447

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (382)..(382)

<223> n=unknown

<400> 123  
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atttcaccag cctcgaaaga caacaacaag tttctaggat atctcaatga caagagtgat 120  
ggataacttag gtagggaaac gctaattgcag gaaaaactgg caacaacaca atttatatca 180  
attctctttg taggcagggtg ataaaaaatt caaggacaaa tctcattatg tcattgtgca 240  
tcatatataa tctcttatga gcgagaatgg ggggaatttg tgtttttact ttacacttca 300  
attccttaca cggatatttca aacaaacagt tttgctgaga ggagcttttg tctctcctta 360  
agaaaatggt tataaagctg anaggaaatc aaacagtaac ttaaaaatga aaacaaaaca 420  
accacaacc tagataacta cagtgat 447

<210> 124

<211> 69

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (20)..(59)

<223> n=unknown

<400> 124  
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tctattttca 69

<210> 125

<211> 202

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (195)..(195)

<223> n=unknown

<400> 125  
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ctctgtagca tgaccttggt gggctgggtt aaagtagggt ctgccaccag tcatgtgaca 120  
gaaaggtacc tcatgcactt cctccttccc ccagaaatca gcctccagga gtgaggaatg 180  
agcccagaat gaganttttag ag 202

<210> 126

<211> 363

<212> DNA

<213> homo sapiens

<400> 126  
cactataata gagatagaag atacattaag aaaattcagt ttgtatcaat aaaacagatc 60  
aacacagaac aaggaaacac catagatatt tgtaaatgag atcttctctt ttgctactgt 120  
gtatatatat tcctttatat ttatacaaac tcacaacaca tgacatttca tatttcatat 180  
gccactgaga agaggtgtca gtatacagaa cataggaaga agaaaaaagc atgagaacat 240  
ctgcttagtt agaattctgat gaggagagac gtgagagcta ttgttcctct ctctgctcag 300  
gcctatcgag aggcaactgc agttttgcta attgttcctc ctgaggattc tgctcatact 360  
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<210> 127

<211> 448

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (411)..(435)

<223> n=unknown

<400> 127  
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ttcattgatt gcaactacaa aggtggactc aaagcaaagc acaatcatgc cagccaacat 180  
tccagaattc tgctgagaac tccaagtctg tgagggggaga ggtttttaca gccagacagg 240  
cctggggggac tgcagtcgcc aaggagaccc tgccacatgc tggccctttg agtgagaatg 300  
ctgcatcttt ctacatatct tcatgagaat actgagaatt ggattttcct tttcaaaatg 360  
cactttgctt tttttgatgt tttgttatgt tgagatgttt ctaaagaaag ntttatgtaa 420  
ttataagatg agcngtgaa ttgtacag 448

<210> 128

<211> 519

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (512)..(512)

<223> n=unknown

<400> 128

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gatacaaaat aatttacaca taagccatac aattttattt tatatagaaa taggtcatta      120
ttacaacagc tgtacaattc actacgcttc atcttataat tacataaaat cttttcttta      180
gaaacatctc aacataacaa aacatacaaa aaaagcaaag tgcattttga aaaggaaaat      240
ccaattctca gtattctcat gaagatatgt agaaagatgc agcattctca ctcaaagggc      300
cagcatgtgg cagggctctc ttggggactg cagtcccca ggctgtctg gcttgtaaaa      360
cctctcccc tcacagactt ggagttctca gcagaattct ggatgttggc tggcatgatt      420
gtgctttgct tttgagtcca cctttgtagt tgcaatccaa tgaagtaaac agggaaatag      480
tccagtgttt tathtagggg ctaaaaaatc cncaccag      519
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<210> 129

<211> 416

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (345)..(396)

<223> n=unknown

<400> 129

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ccaggaggag tcaactccgc aatcagatgt tacagaggat ggtgagagcc ctgaagatcc      120
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ctcagggaca gagggtcagc tgtccgagga ggagaaacca gatcagcagc ccctgagcgg	180
agaagaggag ctagagcctg aggccagtga tggttcaggc tcctgggaag atgcagcttt	240
gctgacggag gccaacctgc ctgctcctgc tcctgcttct gcttctgccc ctgtcctaga	300
gactctgggc agctctgaac ctgctggggg tgctctccga cagcngccca cctgctctag	360
tttcctgaag aaaaggggca gacttccttc acattncagc aatttcccaa ctgact	416

<210> 130

<211> 379

<212> DNA

<213> homo sapiens

<400> 130	
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ggtggggcgc tgtcggagag cccccccagc aggttcagag ctgccagag tctctaggac	120
aggggcagaa gcagaagcag gagcaggagc aggcaggttg gcctccgtca gcaaagctgc	180
atcttcccag gagcctgaac catcactggc ctcaggctct agctcctctt ctccgctcag	240
gggctgctga tctggtttct cctcctcgga cagctgaccc tctgtccctg agggatcttc	300
agggctctca ccatactctg taacatctga ttgaggagtt gactcctcct ggccttcaag	360
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<210> 131

<211> 426

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (37) .. (396)

<223> n=unknown

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actttatgtg ctacnattta actgcagcct tgaacacaca caaaaatatt cttaanggct	120

cagatttagc aaacacagaa gaattttaaa atgagctctc ctttcaacco ttgttaacaa 180  
 gtgcctaana atggaagtac ctgttcagat taatcaaagc aataggattt gatttgatta 240  
 ggtatctttt tacaccagta tgttattttt aaccaaaatg taaagttctt attaaactca 300  
 ttacctgcca ttgtgattgt cccatcatgg cccacctggg ttcttgatgt tgtaaatnac 360  
 atcaatgcat ctgctgtggg tcctttgctg agatgncttc gaaggaattt tgttttagcc 420  
 atatcc 426

<210> 132

<211> 227

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (149)..(202)

<223> n=unknown

<400> 132  
 cagaaaagta acatgaattg cttttataaa acattctaatt attgctaaga agcaggccca 60  
 ttaatagaca aacagaaaag aacatgccaa cgttgtctat ttgtagatta ataaataggc 120  
 aattatttta atatacatat atgtcagcnt tgaactttgg aaaacagctg ctttgtagtg 180  
 gaagtccaac ttggtcaaatt tncatttttt aatcgaagtg aatggtg 227

<210> 133

<211> 515

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (463)..(486)

<223> n=unknown



<400> 133  
actgcgccgg gccaatTTTg gTTTTtcatg gaggactTTT agcaggtctc aaaagTTTtc 60  
ttctaatagt tttcttggtg ttctatcatt cataggtgtt gaatttacca aactTTTTtct 120  
atttcaagta ttacatTTTT actttgttca agtaatattg tatcatatta aatgaacatt 180  
gcattgtgaa aataccctgc ttagtcatgg tatgtaatca tccttatacc tttttgtatt 240  
ctTTTTTTaa atatttctga gaatttctgt gtctaaattt aaataggatg ttgtttcgta 300  
atcatcttgt gattctTTTT tctcctttgg gtattattgg ctaatagatg aattaagaaa 360  
tgttacctct tctactgctt gaagTTTTtg tgagaaattg atgtTTTTtca ttaagtgttg 420  
atgaaatgta caacttaagc agtttataac agctattcta tcnaaaaaga tataatTTTT 480  
ttgtcnatgg atataagtat attccaatat atata 515

<210> 134

<211> 391

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (107)..(382)

<223> n=unknown

<400> 134  
taaatattga taaaaataga aggtaggggc atttgctgc ttcatacatt ccaaaatcaa 60  
agggcagttt tactaattat ttttacattc agtaactcat ttgtctnaca cagtaaacac 120  
aaatattacg naacannact atattcatat tcttcacctt aaaaatggna aaaattttga 180  
gttatttatt gattgtagtn cngganccct ncntatTTTn tcaaattatt ccatgtcaag 240  
tgcctagaat aattgttcat nacatactat gaaatnanaa ataccgatag agatggatta 300  
caaaagtaaa ctgaaaaaan atcctatgaa ttgtttcatt atatatataa tagnatatac 360  
ttatatccan agagcaaaaa anttatatct t 391

<210> 135

<211> 398

<212> DNA

<213> homo sapiens

<400> 135

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gaaaaactta gtcaccctga aaaccacaaa aataaataaa actttagat gtgggcagaa 60
ggtttggggg tggacattgt atgtgtttaa attaaaccct gtatcactga gaagctgttg 120
tatgggtcag agaaaatgaa tgcttagaag ctgttcacat cttcaagagc agaagcaaac 180
cacatgtctc agctatatta ttattttattt tttatgcata aagtgaatca tttcttctgt 240
attaatttcc aaagggtttt accctctatt taaatgcttt gaaaaacagt gcattgacaa 300
tgggttgata tttttcttta aaagaaaaat ataattatga aagccaagat aatctgaagc 360
ctgttttatt ttaaaacttt ttatgttctg tggttgat 398
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<210> 136

<211> 482

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (283)..(356)

<223> n=unknown

<400> 136

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ggcgttgctg aatactgtcc actaactgta caaaatattg actgcatgcc tcgcaaacac 60
caaaatatcc gctggaatgc catagaaata aataacttct gctataaaca catgaaaaca 120
tatcaaactg ttatctcttt aaacatattg taaataaaaa aattaccagt acttctacac 180
aataaatatt aagaaacat tgacatagtt gaaatgcact catataaatt aacaacttta 240
attacattag ccaaacagac attgggttaa gaactgcatg tannnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnncatc 360
aaccacagaa cataaaaagt tttaaaataa aacaggcttc agattatctt gggctttcat 420
aattatattt ttcctttaaa ggaaaatatc aaccattgt caatgcactg tttttccaag 480
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<210> 137

<211> 222

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (6)..(178)

<223> n=unknown

<400> 137

actgantcca gaacactgca tagaaatnan tatggaatag cttccatatt ggnttccttac 60

caatgtactg cagagataag ttttagctgac ctggctacca tattttttgc ccagtttggt 120

caagaagcca cttacaagga agtaagcaaa atggtgaaag atgcattgac tgcaattnag 180

aaaccactg gagatgaaca gtctttcagg gtgtttagaa aa 222

<210> 138

<211> 351

<212> DNA

<213> homo sapiens

<400> 138

cgtacacctg tgctgtgac tggcgggtcca agtccccac acacacatct tgetgggtgcc 60

tttccttgaa gtcaccaccc aggggctggc tgtcatcagc ccattcttgt ccagcaggg 120

taccgagggga atgataaaac agaattgtgt tgaattacac acaaaaatgt tccctgcagc 180

aggtcataaa ctctgtgaac taatgaagct gacaaacaga gctggagtag gtttcccctc 240

acccttcctt tcctcctagc tcagcaaggg gtgctcaggt tcaggatggt gtttggtgat 300

cagggtcaacc aggctccgca agaaaactta tcaggagatt ttatttcatg a 351

<210> 139

<211> 428

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (191)..(191)

<223> n=unknown

<220>

<221> misc\_feature

<222> (400)..(400)

<223> n=unknown

<400> 139

cgccacagct gcagtcagca ccgtcctcac tactgctgag gttatagctc agcaagtgtc 60

agataaacac ttggaagagg gtcggcttta tcctcctttg aataccatta gagatgtttc 120

tctgaaaatt gcagaaaaga ttgtgaaaga tgcataccaa gaaaagacag ccacagttta 180

tcctgaaccg naaaacaaag aagcatttgt ccgtcccag atgtatagta ctgattatga 240

ccagattcta cctgattggt attcctggcc tgaagagggt cagaaaatac agaccaaagt 300

tgaccagtag gataatagca aacatttcta actctattaa tgagggtcttt aaacctttca 360

taatttttaa gggtggaatc ttttataatg attcataagn ccttagataa gatttacttt 420

aacagtct 428

<210> 140

<211> 576

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (572)..(572)

<223> n=unknown

<400> 140  
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 cttttaaaga gaacgtaggc agaataattc agacagaaac cataaataac cagaaggcaa 120  
 agtgaagcaa aattgtctca tgtgatgttt atcccaattt atatcgatat tcttctatca 180  
 atttttagac tgttaaagta aaatcttaat ctaagtgtct tatgaatcat tataaaagat 240  
 tccaaccttt aaaaattatg aaagggttaa agacctcatt aatagagtta gaaatgtttg 300  
 ctattatcct actggtcaac tttggtctgt attttctgca cctcttcagg ccaagaataa 360  
 caatcaggta gaatctggc ataatcagta ctatacatct gggagcggac aaatgcttct 420  
 ttgttttgcg gttcaggata aactgtggct gtcttttctt ggtatgcac tttcacaatc 480  
 ttttctgcaa ttttcagaga aacatctcta atgggtattcc aaaggagggt aaagccgacc 540  
 ctcttccaag tggttatctg acacttgctg angcta 576

<210> 141

<211> 417

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (71)..(71)

<223> n=unknown

<400> 141  
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 tgaagcttgg ngggaagaag ggattctggg ctagaaagg tgcagaagcc tgaagtagaa 120  
 agagacggga ttttgggtccg ggggtggagag cgaatgcatt gaaaagggcc aaggcccagg 180  
 ataaggtaga catttaaagg ggtacggatg cccaaggtag agcagacact tgaggagacc 240  
 agctcagcaa acggaagaca cttaaagtgg taggttctca agagagaaga agtttttaag 300  
 actagagcta agcaagacat ttaaaaggac atggggttggg atttggggaa cacgttttat 360  
 tccagaggca ggaacaaagg agtcgcttgt caaggatctg gttagagaag actaggg 417

<210> 142

<211> 148

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (27) .. (124)

<223> n=unknown

<400> 142

tggttaatac atacagtgat ggcccgcccc caccgacctc gggaccaggg cgcggggcgg 60  
ggacnaggac cggggacaga tngtnacaag gcgggcggnt tncgaactca ccgttgaaac 120  
atcncgcaaa taaacacttt gtagatag 148

<210> 143

<211> 394

<212> DNA

<213> homo sapiens

<400> 143

taaaaactca gtctcttcta gttctcagag aagggtttca tcttctaaga tatccctaag 60  
aaattcttca aaagtaacgg aatcagcatc tgtgatgcc tcccaggatg tgagtgggtc 120  
tgaagataca ttcccaaata aacgacctag gctagaagat aagactgttt ttgacaattt 180  
ttttatcaag aaagagcaaa taaaagcag tggtaatgat ccaaagtata gtacaaccac 240  
agctcagaat tccagcagtt catccagtca gagcaaaatg gttaattgcc cagtttgtca 300  
gaatgaagtt ctggagtctc agattaatga gcacttggac tggcgccttg aagggtgacag 360  
catcaaagtc aaaagcgaag aaagtctttg gaaa 394

<210> 144

<211> 558

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (530)..(549)

<223> n=unknown

<400> 144  
taaagttcaa aatactatatt ccagataact ttccactggt acatcaacta ggcaactttg 60  
ttatgtttat gttatatgta tcagttactt atcagcacag aattttaacc actctgctaa 120  
attttgagaa aacagctaaa ctcaatataa aatttggcct acagaattat agtggctatt 180  
tggtactaaa aatattccaa aagaaattta cttattttac tatattccat attctttaac 240  
ttaaaatctg ctgccactgt ttagtaaaag tgggacaaat aaaattcttt aaaatataga 300  
aaatacagtt cctgttaaga ttttgcaaac aaaaaatta ataaataata caatttgagt 360  
actctaaaac aatatacttt gtagtctaga ttgtggtttt ggtcagtatg tctgacacta 420  
tgaagattta catcagttca gggaatgagt tctaatacta ttaataaata gtcaatataa 480  
ccaaacacct gacaggattc cccatatgga tatttttagg gaagtatacn aataaaaagg 540  
ttaacaggnt ttttaaaa 558

<210> 145

<211> 343

<212> DNA

<213> homo sapiens

<400> 145  
taatcattca ttttatctga aaatataagg aatagtatac tcaactgtgag aatgttcatt 60  
ttacatttaa aatttagtat gtatttgagc atttttctga tcatcagctt ataccaagct 120  
aagaagcaca gctttacata atttatttcc ctcttttcc agcatagttt cttacttttc 180  
attgctgtag ttatgatttt tacaagtttt ttatcagaaa tcttctgtga gattattctt 240  
catatatatt ttttacttat ttgattttat atgttcttcc tctcacctca cttaaatata 300  
tgaagtttta tttttagacg tcttagccac tcctatgctg ctt 343

<210> 146

<211> 368

<212> DNA

<213> homo sapiens

<400> 146

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gcaggatgct ggcagatagc agcaacgccg tgggccacc taccactgtc cgagtgcac 60
acaagtgttt tattcttccc aatgactcta tccattgtga gagagaactg taccaatcgg 120
ccagagcgtg gaaggacat aaggcataca ttgacaaaga gattgaagct ctgcaagata 180
aaattaagaa tttaagagaa gtgagaggac atctgaagag aaggaagcct gaggaatgta 240
gctgcagtaa acaaagctat tacaataaag agaaaggtgt aaaaaagcaa gagaaattaa 300
agagccatct tcacccattc aaggaggctg ctcaggaagt agatagcaaa ctgcaacttt 360
tcaaggag 368
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<210> 147

<211> 437

<212> DNA

<213> homo sapiens

<400> 147

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agccatgcct ttctgctaata cgatttttagc aagtcgaggt aaaacacatg caacattttc 60
tggcaaaagc ttaatgtcaa acaatatgtg atccatactg tgtgtcgtcc ttgggggttt 120
atttgacttt gtcacaatga cagccaacag tgagactgat aagcctgtaa aaataaaaaa 180
ataagactaa tcaaatagac atggcatttt aatctcaaag tgcaaaatca tctaactgaa 240
aatgacggca ttgaaaaatt ccagtgggta aaaatgaatc aaaacttcat tacgcaggca 300
gtggaagtgt gttgaaagat ttaccagggg tgtcaagttt tagacactca gaaaggcacc 360
attctagcca tcttgattgg ataacatgta tatacttatg tccctacgat attcaaaaga 420
taatactggt ttagtac 437
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<210> 148

<211> 359

<212> DNA



<213> homo sapiens

<400> 148

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gtcctcctca gatacccaaa caagctggat actgtgacct ggacatggca aggatataca      60
ttcattcagc tttgtatgct tactttctgc cagctcttca caaaggtaga agttgagttt    120
atgccagttc aagtaccaaa tgatgaagaa aaaaatgac ctgtcctttt tgccaataaa      180
gtccggaatt taatggcaga agctctggga ataccagtaa cagatcatac ctatgaagac      240
tgcagattga tgatttcagc aggacagcta acattgccta tggaagctgg gctggtggaa      300
tttactaaaa ttagccgaaa attgaaatta gattgggatg gtgttcgtaa gcatttggg      359
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<210> 149

<211> 395

<212> DNA

<213> homo sapiens

<400> 149

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cctgaagagc ataggacagt tttagacaac aaagaattgt cctgtatctc atgacttctt      60
tgaacctcgc tgaataatta tgtacataga aatcctgttt ataatgagaa aggaagagca    120
accctacag ctgtcagctg gaagctgatt tagccctaag ggctaggcta ttatattctg      180
ttgaatataa acaatgttat ataacaccaa catctgacaa gtccactctg agtgtggtgg      240
aggaagacaa aaattaagac actccatagg catgttggaa cttagcaaga ttctgtgtaa      300
atcatagagc gaccaaacad tcttgtctct tggcttatat gtgtgatatt tgctccatta      360
cccattagat cactctgttc cttcttcttc ctaga                                  395
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<210> 150

<211> 468

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (413)..(440)

<223> n=unknown

<400> 150  
 cttaaattaa tataagcagc atctactaca ttcacttaga acactagata ttaccaccca 60  
 tgatagacca tctaaatgag aaaactgctt ctcttctcaa atttcataga atgtccatgc 120  
 tggtttccaa agcacatggc atctaccttc agtaagcaac acagaatatt agaacaccag 180  
 agttcaagtt cgtatctata cactcttcag ctccaactaa gagggcctaa gggacagact 240  
 gttcatcaat gactgtagac taatggtttt cacccttca ggcccacagc cactttttat 300  
 cagaaatatt tttaaactg ttttattatt ctaaaacaca aacaatataa cttacgtgag 360  
 gcatatTTTT aaatcatcta tcatgattaa aggtatcttt aatatctaac tagnaatgtna 420  
 cagacnaata aaagggagcn acttacggta atgtgtaatt caaactgg 468

<210> 151

<211> 241

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (180)..(241)

<223> n=unknown

<400> 151  
 cactgtgccc tgtgaaattg gtccttttt atgtgaggtg caaacctctg catcccaactg 60  
 gcctggctctg agcacctcag aagtcctggg tgctgctgaa gttgccaata tttgaaatta 120  
 tattgttttc aaatcttcaa agtaagttga gaactcaaag ccaagtttcc tgaaaaccan 180  
 cntntggtnnt gatnnncang gggcctntta aaacnacang ttttccaanc ccttnttccc 240  
 n 241

<210> 152

<211> 356

<212> DNA

<213> homo sapiens

<400> 152  
 gttgccacag ctgggttagg gccccgacca ctggggcccc ttgtcaggag gagacagcct 60  
 cccggccccg ggaggacaag tcgctgccac ctttggtgc cgacgtgatt ccctgggacg 120  
 gtccggttcc tgccgtcagc tgccggccga gttgggtctc cgtgggttcag gccggctccc 180  
 ccttctcgtt ctcccttctc ccgctgggcc ggtttatcgg gaggagattg tcttccaggg 240  
 ctagcaattg gacttttgat gatgtttgac ccagcggcag gaatagcagg caacgtgatt 300  
 tcaaagctgg gtcagcctc tgtttcttct ctctgtgaat cgcaaaaccc attttg 356

<210> 153

<211> 398

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (342)..(342)

<223> n=unknown

<400> 153  
 gaaaatctgt gatttcattt tattaggcta aaagggtaaa taggctttat tacactgaag 60  
 ctgcatctat atgtcactga cataaagttg aaaaaataaa tgcaggcaaa taactagaga 120  
 cttcttttaa ggggggtttg ctgggtttct ctactgaaa tggccagtcg tgattaaagt 180  
 gataaaaccc catatctgtt ttggtatatt gtacacaaac ctacaaaaat aaactgaact 240  
 tgcaatattt ttgcaaaaaa atctgtcgtt aaaactgagg ataaaatacc tgctcaattt 300  
 tattttacta agtatatatt tacatttcac ccaggcagg cnattttctt ttgtgattat 360  
 aagaaagagt agttgttgat taaaatttca gactaaat 398

<210> 154

<211> 422

<212> DNA

<213> homo sapiens

<400> 154  
gttaatgttg ctttttaaaa atcattatgtt ggtttgatga ttcttgagtt tcaaaattaa 60  
atgcacaatc atttttcgat catgaggaac aatgagtgac aagctcttat cccaacactc 120  
ttcaagttct ctcatcgca ttggcaacca gatgcaggcc tttccagcca cggatgatgag 180  
gctggctccc agtcacctca tgtgagaagc ttcatgctgt gggtggggca agagcaagtg 240  
gagagtccaa gaagaccggg ggtctttag tagcacgtgcc cacttacaag cagcctgggc 300  
tttgacaagc tgtcgatctc ctgagctctg tgttctact gagccatgta gggattgtc 360  
agcaggacaa tgataaacat tttgtaccca cttttagcaa tcttctgaag aacgtttgaa 420  
ac 422

<210> 155

<211> 426

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (416)..(416)

<223> n=unknown

<400> 155  
attatgtcat gtctggtagt ttatacttta agtaatatgc tatctgaacc cggctatgta 60  
cattgaggca tattttaata cactcagact acaaattaca acaacatgca ataaatagga 120  
caccaacaaa aagtcagcac aaagtgaact ttactgagta ttataatcag ctctttggaa 180  
tgccagtttt tcatagtgat attaagatat gggtgttaaa ttagatcaca aaaattgctt 240  
ttcttttaaa tagaaaatgt tatcaatcac acggatgaag aaggatttac tcctctgatg 300  
tggtgctgcag cacacgggca aatagctgtg gtagagttcc tacttcagaa tgtaaggaaa 360  
atgcctccag aaaatgtata tgtatagtta ccttaagtta aagtccttag tagagntttt 420  
aatata 426

<210> 156

<211> 67

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (15)..(15)

<223> n=unknown

<400> 156

aaacaatcac actgngcact ttttaattca acaataagaa caattttttt ctaggggttt 60

atagcaa 67

<210> 157

<211> 388

<212> DNA

<213> homo sapiens

<400> 157

aagtggctgc aattacaggc aaccagcctg acttaaaaca gtatcttaag gtagatgggtg 60

attagcacat gtagtatgct taacatttaa tattataata agacatcaca gcggctgtct 120

catgattaag gctgtgttcc cttgttggtg aggaaattaa ttatgacttg ataaatagaa 180

catgttttaa gaagtggcta tatagctctg gataaaacga acaaaagaat tagaattcct 240

gcggggaata tatacaagac tttatttagt caagtaaaaa aaaatcacta atgtttaact 300

gaagaaagag aaattgaata atatagttct atttcaacat gtgggttcac agattttatc 360

taaccttcca agtaaagttg ttccacta 388

<210> 158

<211> 291

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (173)..(283)

<223> n=unknown

<400> 158

tcatgttagt catgaagtta catctcagtt cataaactgc aagacatctt tgagtagaga 60

tccatctcat tttccgtaac tacacagtga tctactaaac tgattttctg taacttaagt 120

aacccataac tttaatagca ctaaacattt tttccaaatt tttcacaatt ctncacaca 180

tttgcttatg catctatatt tctgcacttg tgctttttga gaacataact gactaggtgt 240

agaattgtgg caaagggtaa ntatattcaa aatgctgaca ggnaacacca c 291

<210> 159

<211> 438

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (25)..(25)

<223> n=unknown

<220>

<221> misc\_feature

<222> (143)..(143)

<223> n=unknown

<220>

<221> misc\_feature

<222> (417)..(427)

<223> n=unknown

<400> 159  
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tgtctcccgc cccaagaccc tcccgttgtc tctgctccc cctgctcacg ctcggcaccg 120  
cgctcgctc cctcggtcg gcncaaagca gcagcttcag cccgaagcc tggctacagc 180  
aatatggcta cctgcctccc ggggacctac gtaccacac acagcgctca cccagtcac 240  
tctcagcggc catcgctgcc atgcagaagt ttacggctt gcaagtaaca ggcaaagtga 300  
tgcagacacc atgaaggcca tgaggcgccc ccgatgtggt gttccagaca agtttggggc 360  
tgagatcaag gccaatgttc gaaggaagcg ctacgccatc cagggtctca aatggcnaca 420  
taatganatc actttctg 438

<210> 160

<211> 407

<212> DNA

<213> homo sapiens

<400> 160  
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aactttgaaa acaaaggac tactttcttt gatgagaggc ctttcctttc actttaaaca 120  
aaacttcaaa ttatcctcag aatttgttct aattctcctt acttctgggt aaaaattatt 180  
agcagtaaca gatttaactt gaatgtatat ctccagttcc ccattctctt ctctatgtag 240  
tgctgccaaa ctcaatagat ttgaaacaaa aattaccag ggaccttccc catctcccat 300  
gtcctttttt cttatggccc agacctggaa gtccctcctaa gtgcttctc tccctcagcc 360  
taaccactct accactatcc agttgtcaca attgcaatta catattt 407

<210> 161

<211> 325

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (292)..(323)

<223> n=unknown

<400> 161

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tctttttacc cctactcgat atacaaaata attattattt gtgatataaa agttctttta 120
agcccaagac agtgactaag ttacatctca aatattttct aatcaagata atcttatttt 180
caagtacaat attcctaggc ctctggctcg ggtctctgta aagacaacat agccgtcact 240
atgtagcaaa taataaaaatt aatgtgactt gcaatattaa tcaactatta gnnaanagtt 300
catgaggcgt tgtgccattt ntnat 325
```

<210> 162

<211> 464

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (236)..(308)

<223> n=unknown

<400> 162

```
caaattatag aagctgttct ttgcataaca aatggcattg taatgctccg attatctaaa 60
tgcaaccatc cttgggtata tgcaggaat tgattccagg gcgctggcct gagtatacca 120
aaatacaagc atactcaaat cttgcagtca gcccctatgga accaaagtat aagaaaagtc 180
agccttccat ataggtaagt tccatatccc acaaatactg catttttgat ctgtgnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnat cataggttta gggaattaga tttgtacatt caccacaagc ctgtggcatc 360
atttaacatg taagtctgca attatcctct gaattttgaa tgtatagatg tttgttgagg 420
ctttcaagtc tacgttgaca tctctttgct ccaggttgct tgca 464
```

<210> 163



<211> 398

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (308)..(328)

<223> n=unknown

<400> 163

```
gtttgtttct gaagttagtt tcttaagtga gttttcaggt gtctctgaaa aatttataac      60
aatcatgtat tatatgtgct gtaacatcat gtacgttacc tccatctatt ttaggatatt      120
ttcctcacct atatattata gggagaataa tttagataca catgctcaga gctgagatat      180
ttctctgata aatcaggtaa caaaatgtat ttgattgatg gaattttgaa gtaaagtgtg      240
ttttatccat cagtttctga gtaacaaaga gcaccaagtt ttaatttaaa taggagattt      300
aacactangg atcagggagt ttagtatnaa gagttaaaaa aattttaaaaa acagtgtgtaag    360
ctgttgaaat ggcaagtga  ttatttaatg gatgtaat                                398
```

<210> 164

<211> 243

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (153)..(240)

<223> n=unknown

<400> 164

```
acataacaca ctaatgcaaa atccagtagc acctgaaaga tttaagtaaa tgctgtcatc      60
atttaaagtc ttttaaatat ctgtaaaaga ctggaggaaa aaaagataaa gtacattctc      120
cagagaacaa atgtatttca aaataaaaac tgnnnnnnnn nnnnnnnnnn nnnnnnnnnn      180
```

nnnnnnnnnn tgtacaagat tcaatagtta tcacatatta acgtngtaca caagnggann 240  
aac 243

<210> 165

<211> 331

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (264)..(323)

<223> n=unknown

<400> 165  
ggacatttat caggaaagca tgccatcttc tcccatgatt aatgaattag tagaagaaaa 60  
gaagattctt aaaggacagt cagaaagcac agaggcacct gcatctggac cgcctacggg 120  
aacagccagc cccagagga gcttgcctgt gatcaacttt gacctggagc cagagtgtcc 180  
agatgccgag ctccgagcca ctctgcagtg gatagctgcc tctgaactgg ggattcccac 240  
catctacttt aagaaatctc aggnaaacag aattnaaaag tttctagatg tcgtgcanct 300  
ngntcatcgg aagttctnga aantgggtga t 331

<210> 166

<211> 239

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (237)..(237)

<223> n=unknown

<400> 166  
caacatagat aacttcatca catggttaca atccagtatt tgagctttgt aagataagta 60

aacatttatt tgagcacaac aaaagtctac acacagtatt ctgggattgt ttaaaaaata 120  
 agtgtattct attccatttg atagcacaaa gaagcacatt tcagcgtgaa ttgatggata 180  
 tattttaaaa ctgggcattt agttaatgtg tcaaattaag cataagaacc taaattnga 239

<210> 167

<211> 388

<212> DNA

<213> homo sapiens

<400> 167  
 ccagattctg acctggagag tgtgaagaca ttgagttctg atgcccagca cctgcagaac 60  
 agcgccctcc ctcccctcag cacagagagt gaaggccacc acgtgttcaa ggctgggtact 120  
 ggggcctggc aggcaaaaag ctccctctgtg cccaccccac ctcccatcca gctcggcagc 180  
 ctggtgacgc aggaggcccc ggctcaggac agcctgggca gctggatcaa ctcttcccct 240  
 gacagcagtg agaacctgtc ggagatcccc ttgtcccaca aagagaggaa ggagatcctg 300  
 actggcacca agtgcactctg ggtgaaggcc gcccggcggg ctgcggggcc ctgggaacga 360  
 ggggcgacac ctgctggcac ccacgaca 388

<210> 168

<211> 372

<212> DNA

<213> homo sapiens

<400> 168  
 gttttttgaa tgatctctgc tccctggctc tatgatagga attctcaacc tgagtgaaca 60  
 attcaaactg agattacttg tgttttagact catatatttt gataacatat gacttctcca 120  
 gtatgcccc aagagctgct aataacttgc tcaacctgaa atttacagtt ttccaaatta 180  
 caggttggca gagatactgg attgataaca acatccacag ttatcatata atcattctta 240  
 tgctgtaaac aaaattattt tggtttagcag aatttaataa ttaactgtta actacatact 300  
 aggcaatatt gtagccactt tatgtgcttc atgacacctt atgggatagg tactattatc 360  
 ctcatcttgc ag 372

<210> 169  
 <211> 468  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (149)..(462)  
 <223> n=unknown

<400> 169  
 acaaatacca tgcatttatt tgcaatactg aaatgtcctc tttaatcaag attttccagg 60  
 gcttaaaaaa atgattatcc ttgctattac ttattaaatg gtatatctag gtgccagaaa 120  
 agatagaaaa catagggtaa acttatttnt aaatagcatg ttatttatat tttcaaatca 180  
 tatgccccagc atgttttctnt tcaatctcta gacatctttt caggtgaaat acctctaaat 240  
 ttcaagcact gtgtgcaatt gttaatctga gaaagataca ataaattcac tntacaatgt 300  
 cttaaaaatt ggaaacatgg gggaaatagn nnnnnnnnnn nnnnnnnnnc caaaaaaaat 360  
 tggcagtgat cattactgag tgttgtgagc caagctctga tctcagccca tttacataca 420  
 cttgcctcnc ttaatcctca cnagcctcta gggaagacat tntgctga 468

<210> 170  
 <211> 473  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (363)..(363)  
 <223> n=unknown

<220>

<221> misc\_feature

<222> (462)..(462)

<223> n=unknown

<400> 170

```
tgttcgaact gagtggacca ttccggcagc agcacttcct agctgggctc ctgctgacgg      60
agctggcact ggccctcgaa cctgaggctg aaggagggcc caggtcagcg gtcaagactg      120
gcctcaatgc ttgactcaga cacagaaggc gaaggggaca ttgcgggtac catcaacccc      180
tctgtggcca tggccattgc tgggtggcccc ctagcccctg gctcccgggc cagcatctcc      240
cagggggccac caacggcttc tcgcgcaggc tgtgccctct ctgctgagtc aagccggacc      300
ttgctggcgt gtgtgctgtg ggtgctgaaa aaacaccgag ccggcgctcc tgcagcgctg      360
ggncactgac ctgacactcc ccagctggg acgtctgttg gattgctgta ctttgccctgg      420
ctgcctttga gtaaaaggg gaaaaaggct ttgaacgcat cnaaaagctc aaa              473
```

<210> 171

<211> 135

<212> DNA

<213> homo sapiens

<400> 171

```
ctcgcccagg ctttttatac cttacaatgt aactttttta ttttatttta ctctatgatt      60
attcaggaat attatctctc agataagttt agggtagat ttctgatttg taacttttta      120
ctgtgttgat ttctt              135
```

<210> 172

<211> 83

<212> DNA

<213> homo sapiens

<400> 172

```
aaccctaaac ttatctgaga gataatattc ctgaataatc atagagtaaa ataaaataaa      60
aaagttacat tgtaaggat aaa              83
```

<210> 173  
 <211> 609  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (256)..(398)  
 <223> n=unknown

<400> 173  
 gatagagata ctatagcttc cagacctgtt ctccttttcc aaaccagtca ggctttcctc 60  
 tttccactct cctgcctcct cctatccctt gcttgcctgg tagagatgga atgggtagca 120  
 gatgttgtct cttaatggca tagcctaagg taacttatta cccacaatcc ttctccaat 180  
 tgtagtgtgt ctgaaatgta atctcctttt attgtagtgt gtctgaaatg tgatctccaa 240  
 gagcgactgc tctgcncatc cctactcgnn ggcacangga nggctcttna annatggnnn 300  
 nnnngntcng atctcagntc tgnagtctgc taggtgtgtg gccttnnnnn nnnnnnnnnn 360  
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnta ataatagttc ctatctcata 420  
 aagttgcttt gaaaattaaa taagcagagt atacttagaa catgggctgg cccaacccaa 480  
 gttatcaata aatgttaact ttataactt aacttaataa gcatgattct gacagtacca 540  
 tttttttaat ataagagaag atgataattt tagtttacct ccatcccat tagtgattgc 600  
 tttgcctcc 609

<210> 174  
 <211> 134  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (21)..(125)  
 <223> n=unknown

<400> 174  
 cttctgcttt ccaactgtgtc ntcttttctg tccctcncaa agntctgntc tcccttgact 60  
 aacttcanaa tctctctctt ggggaggagg ngggggcang agaaccagtc tnggcaaaga 120  
 cantnccaaa ccaa 134

<210> 175

<211> 353

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (64)..(277)

<223> n=unknown

<400> 175  
 aggaaataac aaagtgaaga gacaacccat agaatgtgag ataatatctg caaactatcc 60  
 atcnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120  
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180  
 nnnnncagct tgtagggagg catcaggaag tttccaacca tgggtggaagg caaaagggga 240  
 ataagtatct cacatggcag gtgcagggca aagnnanggg ggaaggggaag tgccacacaa 300  
 ccagatcttg tgagtactca gattttgtga ggggtgcttg aggtcatgga tac 353

<210> 176

<211> 389

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (89)..(307)

<223> n=unknown

<400> 176

```
cacatcaggg taaatgggta tccatgacct caagcacccc tcacaaaatc tgagtactca      60
caagatctgg ttgtgtggca cttcccttnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      300
nnnnnnngat ggatagtttg caaatattat ctcacattct atgggttgtc tcttcacttt      360
ggtatttcct ctcgagccga attccgagc      389
```

<210> 177

<211> 435

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (5)..(413)

<223> n=unknown

<400> 177

```
tttgntttnc cctctaaaag tgaataattc cngtagtttt caggtctgct gcaaataaaa      60
gaggggagcc tggggaggct ggtttacaaa cttcaggaat tngatcaanc acacccaagc      120
tctagtcctt gtagtagtaa caagatgact ggctttctgt gcgttggtcaa annnnnctaa      180
gcactttaca tagnaatgcct cattcntnct tcacaaccac cctgtgtatt tttattcctn      240
gattttacna aaaagggnagn tgnagtttcg agtggttgat actttgcnga tagncatata      300
gctaanaagg atagatctta tnnttaaacc caggcagata acgnagccta tacacttaac      360
ctcttaagaa tcataattcc aaattgtatt nctntagtca gtntacagta gangaaatca      420
ttccagggac cgtgg      435
```

<210> 178



<211> 511

<212> DNA

<213> homo sapiens

<400> 178

```
tttctaagca ggcacagaat gagataagtg agcactgtgg ctggtgggaa agggagggaa      60
acaggtttaa agtatgtttc aaggctgcat tctgagacta ggagggaaag gaagaaaaac      120
tttāaaattc ttctcaaggc tgagatattt gactacagtc tcatgcccaa aatgtttcta      180
ttctacactg agacctgata gataatttgg ctgcatacct ggagtccagt gtgtgcacct      240
gcccctccca tcccatactc gcagccagtg gaaaagtctg caaaaggaag ccagctggga      300
gtgcccacca gagtcaaagt ctggggcagg ctggtggact caagaggagt cttaaattatt      360
ggaaatgtca tcacaaacca tctgggaagc ccccttctct taaaaggac ataaagtcaa      420
agtgaacagg tgtgtcact ccaagcccgt gccacaacc acagtgcctt ttcacattca      480
gagtcatggc cactaagcca caaaattgtg a                                     511
```

<210> 179

<211> 547 /

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (161)..(161)

<223> n=unknown

<400> 179

```
gcccacccag ctattgaaaa ggactttctg tgggcacaca ctctgtttca gactgggctg      60
ggggcacacg tgctgggtga gacagtgggc cctcgtcccc tccccctcc caattctctg      120
ccccaggcta atattaggga ctggggaggg gaccaccaga ngggagaggg aagctgctta      180
ctttgggggt agacctgaa gcccctcctc ctccccccac agatggggac aggaggtgat      240
ggggtgctca gaacctgca gctcccactt ctttagccgg gcagctgttt gggggacaag      300
agagggccag ggtctgtgct tctgctcccg gcactgggtc gggagtctgg gaagagtgga      360
```

gaagaggcag ggtcaggcct cagcatctca catccaccac ctccaggagg ggagaccact 420  
 ggtaagtcct cctcctgctc aactcaaggg actcagaccc tttcttgact gagacgcatg 480  
 agtgccttct tgggtgagaa cagccccagg gtttaagttg ggcgtcctaa gcagctgcaa 540  
 gcaagtg 547

<210> 180

<211> 299

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (106)..(106)

<223> n=unknown

<220>

<221> misc\_feature

<222> (267)..(267)

<223> n=unknown

<400> 180

cgctctagca tttgctctac gcgcgcagga gatgaaacac aagggggcct gacagacgtt 60  
 gctacagccc cagcagggga gtgtttgtcc cgcctacagg ggaggngctt aggggatttc 120  
 tttaggaaaa aaagaaaaaa agtctggtgc ttttttcttc accattgaaa aactgtgctt 180  
 gttcattagg cgtaaagagt taagaatact tgcacggagg ctgggaacat ttgcagaaga 240  
 ggagcttgag tcttgccaca ggtggtngcc aagggaact gggtgccgaa ggggtcctg 299

<210> 181

<211> 429

<212> DNA

<213> homo sapiens

<400> 181  
tccaggacca aggaaagagg agcgtgccct ctgagaagtt aaccacagcc atgaaccgct 60  
tcaaggctgc cctggaggag gctaattgggg agatagaaaa gttagcaat agatccaata 120  
tctgcaggtt tctaacagca agccaggaca aaatactctt caaggacgtg aacaggaagc 180  
tgagtgatgt ctggaaggag ctctcgctgt tacttcaggt tgagcaacgc atgcctgttt 240  
caccataag ccaaggagcg tcctgggcac aggaagatca gcaggatgca gacgaagaca 300  
ggcgagcttt ccagatgcta agaagagata atgaaaaaat agaagcttca ctgagacgat 360  
tagaaatcaa catgaaagaa atcaaggaaa ctttgaggca gtatttacca ccaaaatgca 420  
tgcaggaga 429

<210> 182

<211> 259

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (254)..(254)

<223> n=unknown

<400> 182  
tgggcaattt gggctgggat ctgcttgagt gggtcttctg gtcttgattg gcctcattca 60  
tgtgttagct gccatgttgg ttgggctagt atgacttcag ctaggaaagc atgtttctgc 120  
ttcatgtggt ctctcattct ccagcatgct cactcaacat gtcatggct gggttaagggt 180  
ccaacagaca ttataaaggc ctcttgaaac ctaggcttgg aactggcata cagtcacttc 240  
ttccacattc tatngatca 259

<210> 183

<211> 421

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (22)..(22)

<223> n=unknown

<220>

<221> misc\_feature

<222> (366)..(366)

<223> n=unknown

<400> 183

atggggagag agaagctgaa antgccgact gcgacctgca gatcaccaat gcgcagacga 60

aagaagaata tactgatgat aatgctctga ttcctaagaa ttcttctgta attgtagaa 120

gaattcctat tggaggtggt aaatctacaa gcaagacata tgttataagt cgaactgaac 180

cagcgatggc aactacaaaa gcaattgatg actcttccgc gtctatttct ctggcccagc 240

ttacaaagac tgccaatctg gctgaagcca atgcttctga agaagataaa attaaagcaa 300

tgatgtcgca atctggccat gaatacgacc caatcaatta catgaagaaa cctctaggtc 360

caccantcc atcttacacg tgtttccggt gtgggtaaac tggacattat attaagaatt 420

g 421

<210> 184

<211> 337

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (4)..(4)

<223> n=unknown

<220>

<221> misc\_feature

<222> (308)..(334)

<223> n=unknown

<400> 184

```
gttnngaaga gccattccaa gtaaatacaa atattctaaa atatacatct tccaagattc      60
agcacttctt acattcatca cagtaactgt ttccacagca ggaatcaca acagcatcag      120
tcataaatatc cttgcagatg agacacaaca attcatctgg gataggatca tcttcttctg      180
aggaagaaga tggctcctct ggtaagaagg gaggtttctc tttcttccca attgcatatg      240
cttctgcacg tatagttggg attgcatatt ttccagtgtt ggtaagcatt gcacctttca      300
tattaggntc tttcacttcc atcatgaanc tncnggg                                337
```

<210> 185

<211> 419

<212> DNA

<213> homo sapiens

<400> 185

```
gttaaaaaca atggccagtc agggaggccc caagtatact ctctcacagc agccttgggc      60
acaaccagca aaggctcagt accttgcggc aactgcatat aagacaataa aaacaaagct      120
gcctgtgaca ttgagaagta tgtccttgta cctatccaat aaagataccg agttcatctt      180
gtttaaacct gtgaggaata atattcagca agtcttccag aagttccacg ctctgttaaa      240
ggaagagttc agccctgaag acatccagat cattgcctgt ccatctatgg aacagctgag      300
ccttctgctg tcagtttcta aataagcagg ccagccgggc tgtgcacctt aaatgtctgt      360
ctgggaggag caggctgaga agtcttgcag tctgcaggac aaccgaggaa tcgtatgtg      419
```

<210> 186

<211> 490

<212> DNA

<213> homo sapiens

<400> 186

```
tcacatttat taaaaacagc aatttctagc caaataatat aaagcatttt aaattatttg      60
```

aaagtatata cactctttgt ataagtgaac acttaaaact gtacagattt aaacaaataa	120
tcatttagca aacaagttgg gtcactatta cctactcagc actttgtaag gtgtttgagt	180
gtttcagaaa taaaagatca aaagacaaga accaatgtca ttaaataatt ttataagaac	240
acactccgct ctgtaaataca aattaaataca gtcacgtact tactgtacaa taatcatgcc	300
ctcatttctt tggaaaggct attaaaaatc aaatgtacat ataatacaca aaactggata	360
ttttacagtt tatttcatta aacatgtatt taaaaaacag ttaagtaaata acaatcttcc	420
taattcattc atttcatggc aaagaatgaa tatggggcct cttaccttct accttctcaa	480
aatagagagt	490

<210> 187

<211> 418

<212> DNA

<213> homo sapiens

<400> 187	
ggcggcggtg tctcaggcgg caatggaagg atccgagcct gtggcgccc atcaggggga	60
agaggcgctc tgttcttctt gggggactgg cagcacaat aaaaatttgc ccattatgtc	120
aacagcatct gtggaaatcg atgatgcatt gtacagtcga cagaggtagc ttcttggaga	180
cacagcaatg cagaagatgg ccaagtccca tgttttctta agtgggatgg gtggtcttgg	240
tttgaaatt gcaaagaatc ttgttcttgc agggattaag gcagttacaa ttcatgatac	300
agaaaaatgc caagcatggg atctaggaac caacttcttt ctcagtgaag atgatgttgt	360
taataagaga aacagggtg aagctgtact taaacatatt gcagaactaa atccatac	418

<210> 188

<211> 415

<212> DNA

<213> homo sapiens

<400> 188	
ctcagtacc tgccttcttg actggttcc gttcatcagt cctgtccctc ttcaagtaat	60
ctagaagaat gtggatactc ttaggcgtga atgtaaatgc cttaatattg aaggctctgg	120
ttagaagcat gatacaagac atctactgga ttcatattta caaatatcct ggaatgttat	180
agcttcaaag tatattagaa aaaccccaaa gatggtataa tctttaagtg tgcacgttcg	240

tttattttctg catctttccct ccaaacttgc ctttgcattct taaatatttc actatgcaca	300
ctcccattcc tcttgggttt catcttgtcg ttttaagaaat gtactgaaat aatcattgga	360
atatttgcatt tttgcacaat gactggtatg gatagctctt gacaaataag ggaag	415

<210> 189

<211> 504

<212> DNA

<213> homo sapiens

<400> 189	
tattaaaaac tggtttttagg tccaaataat gaagatgtag aaaaacaacc tacagtccca	60
ttataacatt ttgaaattca tttataaaaa atttacagca gctgtaaagt ttcagtatcg	120
taaggacaac gtgatcctac aaacagccaa aggatgtaga caagatgttt ttctgtcttc	180
caaataacac aaactgaaaa gaaaagcctt tgcttttcct tggccacata aaactagtat	240
ttccacacta ctggttaata accccaagaa acctttgctt ctcttagtca atttgctcat	300
tatggctaca agactacagc tcaacatcac aagcccagaa gaaatgctgg taagacatca	360
atctgagcat ttcccagagc ccaatcacia catttcagtg ctttccttat ttgtcaagag	420
ctatcatacc agtcattgtg caaaatgcaa atattccaat gattatttca gtacatttct	480
taaacgacaa gatgaaaccc aaga	504

<210> 190

<211> 306

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (228)..(290)

<223> n=unknown

<400> 190	
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agagaggagg	aagtgggagg	aaggccgtat	cgactacatg	gggaaggacg	cgtttgctcg	180
catccaggag	aagctggacc	ggttcctgca	gtaatccggc	agctggtnng	cgttgtgtgt	240
agttagacaa	tgtcctgttg	ggtggtcctg	ttgcgtggag	atctcctctn	gtcctttcaa	300
agggaa						306

<210> 191

<211> 484

<212> DNA

<213> homo sapiens

<400> 191

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tccctgaaca	ttcccgtggt	ctccttctga	aagccgatga	ccatccaacc	ctgactcacc	180
tgaaatatcc	tacgagcctc	gccctccgag	actgacgatt	attaaccacc	cacacggaaa	240
aagaaacagc	ccctccatca	cccacatctt	gtacacaaaa	aaatgccacc	actaatgcca	300
taaattcagg	caggttcctc	tatccaaagg	ctaaactgct	tcaggtgacc	taaaaagtgg	360
ccacgcctct	ccacgtaaac	acatccagct	gacacaggct	aggatcgagt	tctcccacgg	420
ccttctatc	ccgtctctaa	tttactctct	gcttttcctt	ggaatgtgca	tgagaaataa	480
acct						484

<210> 192

<211> 342

<212> DNA

<213> homo sapiens

<400> 192

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cgccagggac	ctagaggagc	ctttggcatt	tgggggctgt	ggggaacatg	aagtgagcgc	120
gactcacggc	ctggagtgca	ggaaaggctt	ctcctgcaag	gcggtggctt	caaaaaccag	180
aagtctggta	gcaccacgtg	cggcgtctct	aaactcttgg	tcgtctctga	cttttaaaca	240
tctagggaaa	gttctaaaac	gtgtgtcctg	gcgtagtagt	tttggttggc	acttggtagg	300



gaggggaagaa tttgtaaagc actgtaactt ctatagttaa tc

342

<210> 193

<211> 479

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (5)..(5)

<223> n=unknown

<220>

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<222> (36)..(36)

<223> n=unknown

<220>

<221> misc\_feature

<222> (460)..(460)

<223> n=unknown

<400> 193

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agcttcaagt tctaggetca gccacgtact aagcttcaaa atgcatggga ggaggtttgt 180

ggggagtgt accgccggga tccaagctcc actggaagga ttaactatag aagttacagt 240

gctttacaaa ttcttcctc ctcaccaagt gccaaccaa actactacgc caggacacac 300

gttttagaac ttccctaga tgtttaaaag tcagagacga ccaagagttt agagacgccg 360

cacgtggtgc taccagactt ctggttttg aagccaccgc cttgcaggag aagcctttcc 420

tgcactccag gccgtgagtc gcgctcactt catgttcccn acagcccca aatgccaaa 479

<210> 194  
 <211> 418  
 <212> DNA  
 <213> homo sapiens

<400> 194  
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 agctgcagat ctgggctggg ctgttggcta aagtgtcttt cacagacacc tcattcggct 180  
 cttccttcag cttcttcact tatttcttac tcagtcacta ctcagctcct tgtccatgtg 240  
 tccttgaagc catcctaggt cttattctga ttctgaattc ttcagtcacc cataagcttg 300  
 tccttaccgg gagtcagtgg gtgtgtgttc ccaggtggac ttaaccattc ttctccttta 360  
 tgatcctttc ccttgggtgg acaagtgtga tttggttgta aggccatttt tcaagttg 418

<210> 195  
 <211> 179  
 <212> DNA  
 <213> homo sapiens

<400> 195  
 aaataactaga agcatcacct cacaatcctt gtgaccaagg agagagactt gaaacctaag 60  
 gatctctatc tttcctcatg gttgggttct ctttagagat gggtttgcag aaaggacatc 120  
 ataaatgttc attctgtccc cagtgtagta aattcctagc acaaagaaca gatggaaag 179

<210> 196  
 <211> 357  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (150)..(163)

<223> n=unknown

<400> 196

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aaaactgaat ctacccttgg gcagatgact tgggattgga ttctatacag cagtcttgct      120
caatcttccc agtttccagt tttatgatan cnccaattgg ttnttacaag ctagaagaca      180
atgaatgtat aagttctatg gaacagtgag ataaatctaa gcttcttgtc tttgtattta      240
gaaacattga ttctatggat gatcatttgt atcatgttga ccctttgact tgtactgaag      300
gtgattttaa atttaagtat gtagtgtttg aatttcttcc atccatgtcg ttttaaat      357
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<210> 197

<211> 399

<212> DNA

<213> homo sapiens

<400> 197

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tcctttggtg cagtttagca tgttcctctg tgttctgcat ctctgtagt gtaatgttca      120
agctcagaaa tgccttatgt ggatcgtcag aatcgcatth gtggttttct agacattgaa      180
gaaaatgaaa acagtgggaa atttcttcga aggtacttca tactggatac cagagaagat      240
agtttcgtgt ggtacatgga taatccacag aacctacctt ctggatcatc acgtgttgga      300
gccattaagc ttacctacat ttcaaagggt agcgatgcta ctaagctaag gcccaaaggc      360
ggagttctgt tttgttatga atgcaggaat gaggaagta      399
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<210> 198

<211> 469

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (172)..(466)

<223> n=unknown

<400> 198  
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 gcaggcaggc tccgtgcgct tctgcctcac acgtcactga caggaaggct cncatcnncn 180  
 aagtcnanta ggtcacnato ttntnctga gggncatttt tactttgagg tcttaacnga 240  
 gcntgttcag tcactttgga agctggttct cttggagaga nagtntggac cttgaagtgc 300  
 cctggcttga ccttggcaag agactcgtaa aatcctcgct tctccatggg aaagggtgag 360  
 accaaagagt tgctgcgana ggctgtggaa tgtgaggtgg cggcggctgc gttggtaggn 420  
 cggaaagcgt gtttggattc tgaaggaccg gggggatgct cctcnntat 469

<210> 199

<211> 288

<212> DNA

<213> homo sapiens

<400> 199  
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 gttcctagat gagtcccttc tccagctcag gctcggccta agcctcaggg ttccttactt 120  
 ggtgggcacc acctgctccc tccccgcct ttgttctct ttttctctg ctggctctc 180  
 cgggggttggg tgtgttcaga ggcagagaca ggctcaaggt ctttggcttt taggttctgt 240  
 tgatgggtga gttccagata tagctttctt ttgtaggata tttcattt 288

<210> 200

<211> 288

<212> DNA

<213> homo sapiens

<400> 200  
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 aagccaaaga ccttgagcct gtctctgcct ctgaacacac ccaaccccg aggagccagc 120  
 agaggaaaaa gaggaacaaa ggcggggaag ggagcaggtg gtgcccacca agtaaggaac 180  
 cctgaggctt aggccgagcc tgagctggag aagggactca tctaggaact gggatatgaga 240

ttaaagttta gatttgtctg gcctggattc tgtaacacct aaacaaga

288

<210> 201

<211> 428

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (215)..(286)

<223> n=unknown

<400> 201

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tcttatcttt ataatgatt ataccggtcc gtctgggaga acaagatgct aaatgttaca 120

tattccttcc ttctttcatt ggaagtcat tggaaatttt atacacgtac catgcataca 180

gagaagttcg tgcatacaaa agattcaact cgatnnnnnn nnnnnnnnnn nnnnnnnnnn 240

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnggct gcttgtgtct 300

gttcagtcga ctgactcaga attttgtgat ggcattggaaa gcttggcttg ttgtctgccg 360

gcagtgagta ttgatgattt tgggaacacg ttccattca cagtgccttt tcagttgtag 420

gtagtttt 428

<210> 202

<211> 464

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (14)..(463)

<223> n=unknown

<400> 202  
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gccaanagggc atnngatcct gacgtaggna agccacagga ccnagacctg gaggtaaagg 120  
ggnaggccac cttngtttca angnaccaca aagaatntag tctggtggga agagaggaag 180  
gcangcngca cctgnaagac nnngtcccng ctgcagtana ggccatcttc tgctatgcan 240  
tntgctcacc anaaggetca actctaagga gcnnacccca gtcnctagca gantgaacan 300  
gaagcatgan actnctccca gtnaaaacta ncctacaact gananggcac tgtgaatnga 360  
aacgnnttcc cnaantcatc antactcact gccggcanac ancaagccaa nctttccatn 420  
ccatcacaaa attcngagtc agtgantgga ncngacncaa gcng 464

<210> 203

<211> 422

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (258)..(284)

<223> n=unknown

<400> 203  
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atgttctaag cgtggtgtac ttctgacaaa ctgggggcac cctggggatg aatttagagt 120  
agtgcgatgg gatggcaaat atccggaaag agtttctgag gagcagtttt tagtttgaag 180  
aaattcaaga aatttccctt tactttttta ggaagagggg gtctgtctag catgagttag 240  
cttatgttgc tgcgtccnnn nnnnnnnnnn nnnnnnnnnn nnnncggtct tttgagaaag 300  
ctagaaaata aattcttagt caaagttgcc catcctgttt gccgcacttt ataagttatt 360  
gttgctgaat gattgggagc tgtccatcag cggcagagaa cttgcagttt acttaagaaa 420  
tt 464

<210> 204

<211> 349

<212> DNA

<213> homo sapiens

<400> 204

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ctgtccatca gcggcagaga atttgcagtt tacttaagaa attgcgtgtg tgacaaaagc      120
agctgccagg agtgtggtgg tccgcgtgaa tagagggaga gaaggcaatt aggggggctgt      180
gtgggttgggg ctttttactt gtcaaagtgg aggctcattg cttttgttac caccatgtaa      240
agggaatggc aggggtttgt tttggtatta agggccttaa agattgctgc ctgacactta      300
cacaggaagg ccagataagt ccagaaagag agggccacgga gcagtattt      349
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<210> 205

<211> 116

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (99)..(105)

<223> n=unknown

<400> 205

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gatctgagcc ttgacgcagg ccaagtggaa aaatacttnc cngcncacct cccctg      116
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<210> 206

<211> 449

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (11) .. (21)

<223> n=unknown

<220>

<221> misc\_feature

<222> (447) .. (447)

<223> n=unknown

<400> 206

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cttgctgggt cattcctaga atagactgaa cgtcgggtac acataaagac aaaaggcttg      120
acctcaggat aagtcgaagg ttaagaaaag aaatcattcc atgaagcaaa gaaaaaaaaa      180
tgcccgttgt caactaactg atcagtacgg ctttcaataa tggatgatgaa caagtaggta      240
aacaccactt ccccttgtag aattgggttat attgaagact actaactagg ttactacatt      300
tccccacac tcaactgtaca gttagggtatt tggtttttaca ttgatctatc tactagggtgc      360
aaagatttgg tgagtggcat tggctaaaat ttaattgtag cttttttaaa aattacaatt      420
tcacatttta acagttactt tccagcattt      449
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<210> 207

<211> 351

<212> DNA

<213> homo sapiens

<400> 207

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cagggccttg gcctttcttat taatggacct gagggatgtg ggggaaaagc agcacatctg      60
cccctgggttg ctaagggtgca cacgtcccat gggagctgaa ggcagggtccc ctagtgtctc      120
cctgagcctg catgggagct gctgggttctt agaaagcctg tgcattttcc aagggtcccag      180
acaccagcac tccctggggg gccaccgtga tgtgggagtt accgaggggt ggagctgctc      240
ctctttctct tgccatctcc atcctccaag tgctgcacgc tggcatccag gttaagctgc      300
ctctcatacg gggacaggac agagctgtgg ggtgagaaca gcgggtgggc c      351
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<210> 208

<211> 412

<212> DNA

<213> homo sapiens

<400> 208

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ccatctttgc tgtcatttac ctccctcttca ctgtggggtt catgcggcac cacactcagt    120
ccattaagta caaagaggag aacctggtga ggcggaacct gttcatcaca ggactcccca      180
gagatgccag gaaggagact gtggagagcc acttccggga cgcgtatccc acgtgtgagg      240
tggttgatgt gcagctgtgc tacaacgtgg gccaaactga tctacctgtg caaggagaaa      300
aagaagactg agaagagcct gacctattac acaaacctgc aggtgaagac aggccagcgg      360
gacctcatc aacccaagc cctgtgggcc agttttgctg ctgtgaagtg ct      412
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<210> 209

<211> 477

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (469)..(469)

<223> n=unknown

<400> 209

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ccctccttgc tggcagaggc acgggaggcc tgctggggat gaggccactg gccagggcta      120
tgctgcacca gaccaatggc accgccccca cccctcccag cgcaggggca gcttggagca      180
gaggcagcac tggccaccac tgcgggggca agtcagcgtc aagagagtcc ctgagtgaga      240
aggcccagat aagcccaggc ccccaggcc agcggacagg cacaggcagg gcctacagag      300
gtgccaaggc cccaggccag ttgtgctagg agcctggacc tgctcttcca ccccccatc      360
ccgcccctac tgcacaggct tgtgccttgg tgccccctgg aggcagcagg gaggaggctt      420
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ctcaggcaga agtcttaagt tgcattccat tccccagagt cccaggang gagaaga 477

<210> 210

<211> 433

<212> DNA

<213> homo sapiens

<400> 210

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cggccggagg gtcccggccg gtggggccaa ctcagaggga gaggaaggga ctagagacac 120  
gaagaacgca aaccatcaaa tttagaagaa aaagcccttt gactttttcc ccctctccct 180  
ccccaatggc tgtgtagcaa acatccctgg cgataccttg gaaaggacga agttgggtctg 240  
cagtcgcaat ttcgtgggtt gagttcacag ttgtgagtcg ggggctcgga gatggagccg 300  
tggctcctcta ggtggaaaac gaaacgggtg ctctgggatt tcaccgtaac aaccctcgca 360  
ttgaccttcc tcttccaagc tagagaggtc agaggactgc tccagttgat gtataaaagc 420  
actagatttt cac 433

<210> 211

<211> 424

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (254)..(270)

<223> n=unknown

<400> 211

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agggctgggc tgggctggcc ttctggccct atctgctccg tgcccaaccc agcgccccgc 180  
acagtcggag ctttgtaa at acgaggtgac tgtctgccta caaactttgt aaacatcact 240  
tgaaatggcc gcanggcatt gcgacatggn cataccacta tttgtttgct attgaatttg 300

tacttcctg ccttactttt gctattgcaa accatgctgt cactaaggtc ttcatgcaca	360
cagttgtgtc ttggtcagat gatatgtttc taccaatttt aattgtgttt cttccacct	420
ggac	424

<210> 212

<211> 601

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (11)..(38)

<223> n=unknown

<220>

<221> misc\_feature

<222> (398)..(398)

<223> n=unknown

<400> 212

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gccaggaatc tgtgacatct ccagggcatc atttgagtcc tgccttctca aagtacttgt	120
gacaggcaga cgtgattgca gccacgaaca cgatgaactc actgaagtcc acctgggcat	180
ctccattggc gtccaggtcc ttgagcaatt tatccacggc atccttgtct tttccactct	240
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caagcactgc tgctgggcag gagcagggca cccacatctg cgtcaccttt gctgtcattc	360
aggctcaggg ccagggccag ctgtgcatag cagacacntg gcattcctgg ccttaagaac	420
ttgtgagctg ccttcagcta tctggcatga catgaactaa cttgtaatgt ttttagagcg	480
aattggaatt gtgctctgcg agagggagtt tcattttgag tttttgccgg gggttgtctt	540
tggatttgta aagtgcttta cagtgatggt tgttctcagg aaatgcatcc agtctttgct	600
c	601

<210> 213

<211> 400

<212> DNA

<213> homo sapiens

<400> 213

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aggccataag attctcatgg ccagagccag atttcaacag tagctcctgg cactgtggac 120
acacactgga aatacagctg aggccagaga tgggtgtccaa cctcctgagg ctctcctttc 180
cttcccaacc aggacaggct gagtctcctc tgctgttctt ggggataccc aagataccca 240
tcagctaaaa ggcccccaag ctatcactga caacatcttt aaaccagca acaggcctgg 300
gtccccctg cactgctgac ctctcgcgca ggctgtgcgg ggagaccttt gtggtcggag 360
cacaccaagc ctccagcgtc ctccccagtg tttagcatgg 400
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<210> 214

<211> 435

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (38)..(77)

<223> n=unknown

<400> 214

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nnnnnnnnnn nnnnnntgt ttgtttttaa gaacaggtaa ccccttttaa atttttctcc 120
tttttttaat aactggggat ttggatggac aaagaaaaga atggcatagg gacggcattt 180
cagcctgggg gagcagcaga ccagtagct cagagataga aaagccactg gcatttgcag 240
gagtgcagaa ggccaggcct gctcagagca gaagggtcac tgggaagggt agtgtgtgac 300
atggtcagag aagtcacaga ggatctagga ataatcccag cagccaggcc tcctgtacca 360
ggggttaata agtatttgag gcacatttcc cccattggct ttcatcccca ttgcatectt 420
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agttcagctc agcag

435

<210> 215

<211> 296

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (48)..(48)

<223> n=unknown

<400> 215  
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cacacattca tatatggttt cagtcacaaa atgggggtcat tctctccctt gacctatcat 180  
ttagggcatt ggaacatggc tgcattgtggc tctgtttgtg aggggtccagg ggatggacag 240  
ggaggctctg cattattttg cttttaccaa cattgcagca tgaacgtttt tttaac 296

<210> 216

<211> 515

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (507)..(507)

<223> n=unknown

<400> 216  
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ggtaacacag tcaaccaggt tgcctctggc aacaaagagt tcttggttat gatggactga	180
aactggcaga gacctcgctg ctgggtgaga ctagccaggg agcttagggg taaggagggc	240
acccctgtc caacagggag attcttaggt caggagcac ctggctggct tcctcactca	300
ccgccgaagt gggcattgga tttgacctat tacgaacctg gagcaggacc agggatgccc	360
tggttgctct gcagaatgtg gctcagaggt aagtgatctg ttcgggatac ccagtactg	420
tgctcagagc catgcctccc tgggcagccg gaggaacatg gatgtgctct ggaatgtctt	480
taacaccttt ttttgttagt tccaganccc ctgag	515

<210> 217

<211> 439

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (123)..(123)

<223> n=unknown

<220>

<221> misc\_feature

<222> (387)..(387)

<223> n=unknown

<400> 217

atgtgctttt ggaaatagtg ttttcctcaa gtatctgctt ttgtgcagca cttgggttta	60
aacaaacaac aaatttcgat accaacttct tgggcttcaa gctattgagc acttatagcc	120
acnactatca agtatagtta tgatacagac agtccaaatt tatggaaaat attacaaaga	180
caaatgcctt gaaaagatga cacagtgcag ggaaaactac agctattaag ctggtataaa	240
aacttagtca aaatgtttta gtccattatg gctctgccta aagcttcaaa ggaagaaaat	300
ttaagacact tctcatccaa ggcacttaaa agagttgcaa taaagtactt ctttgaattt	360
agtttgagcc caacagtatt ttttatncct ttttcacatt ctgactcaca ctgaaacagt	420
ccttgaaggc agctattaa	439

<210> 218  
 <211> 393  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (378)..(378)  
 <223> n=unknown

<400> 218  
 cgagcgcgatg cctctctctg atcacaggta gcactcagat taccctgcct gctctgtgct 60  
 ttgctgcaga ccatttgacc agaacgtgtg cagctcagcc agccacagaa ctggaatttt 120  
 tcaggagcag ggggagcatg gagtttggac ttgctgagc aactgaagtg gagcgcagag 180  
 cttgctcgct taggagagag catcatggat ggcaaacaag ggggcatgga tgggagcaag 240  
 cccgcggggc caagggactt tcctggcatc aggcttcttt caaaccatt gatgggcat 300  
 gctgtgtctg attggtctcc tatgcatgaa gctgcaatcc acggacatca gctgtctctg 360  
 aggaacctca tcagccangg gtgggctgtg aac 393

<210> 219  
 <211> 540  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (485)..(485)  
 <223> n=unknown

<400> 219  
 gcagagatgg aaccaggaca gtgatgctgg aaaagcctgc ctgatcaag tcatcacata 60

agttaatgtc agaaaacctg tatttgaatt tgactcctct atccttactc tggaaaattg	120
gacatcttga cccagtggct gtgagggtta aattagatga tgcagaaagt gcttggcatg	180
cagtagatat gcaaaacaat aacttatgac actctccatg cagggaaaaa agtcttcatg	240
ccttctaact aataatacaa acgtatgcag tgtctttcaa ccctggcttg agtttaacaa	300
atacaaattg aatagaaaaa attagtcaaa ctccataaac aagtttataa caaatacaaa	360
tctaactgaa aaaactagtc aaactctata aatccaactt gattttaaaa ttctagtggc	420
tacaacactc aataatgttt tcacatcggt tgtgaatcca ttccctagat gcatttaaag	480
atgtnggaga aactgtttca gatcctccgg ggaggacgag ttgggtatct tatgatgctg	540

<210> 220

<211> 475

<212> DNA

<213> homo sapiens

<400> 220

gagaaattat cattcccttc ctgcaccccc tgtcagttcc cattttgaca gcattttggt	60
attgtcattg atgacattat taatatagaa gcaggaaaaa agtcaaata gatttctttc	120
atcctctagt ctgggtctgaa agttcaaata ccttcttttg ccaacggtag tcaggatgatg	180
ccaccaagca aagagacccc tgagcagccc tgagacttcc ggatatattcc tgcacctgcg	240
gtattggaga agatgctgtg aatatccaga taggcttctc tccaaagagt cagagctgaa	300
aataccaggg aagtggtttt tggatccttc ctgggggcatc ctgccaggga catggcctgg	360
ctcaagctct agcaggggaa gtctgggtatc aagtctcacc tggcaggaat tgagcccaga	420
atggaatatg ctacaggcag agcagccctc ccatctcttc ctacagccgac ctgag	475

<210> 221

<211> 460

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (237)..(237)



<223> n=unknown

<400> 221

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atctatttga ttaagagaaa cagaggagat aggaaatgta aagccactga ctatTTTTgt      60
tggtatctag gcaaaagctg tgcctcactt ctgcgggttg aaccctttgt atgtgcccag      120
tgccgccaca gatttcaccc ctactggaa gcaagaaaag aatggtaaga ttctatgtga      180
gcagtgtatg acctccaacc agaaaaaggc tctaaaagct gaacacacca accggcngaa      240
aaatgcattt gtgaaagccc tacagcagga acaggtaaga attctgactg ctactggcc      300
acctgtccca gtttgTTTT tccaaagggt cgcgccttct agtttgcagg agtggttcat      360
gtgatcccta cagtccacag gttccctttt tgtctcetta tcattgtgtc taattccatt      420
tgagcgagta ttctgattaa ggaacatggt aaaatatatg      460
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<210> 222

<211> 336

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (3)...(328)

<223> n=unknown

<400> 222

```
canagcataa atngngTTTT nnttttnact cccgcctacc cgatcttcca aaaagtccat      60
natgctactc anacaaggga ntctgatggg tggngtgggg aataggnta aaaggatctg      120
agttnccca cactttttt cttctcgaag atattctcat cctataacng ctacatgagt      180
tgtncacata ctctagaacc antactcttc actgggctac ttcataattc actctttctt      240
tcgtcatttc ntatcaaaaa cgcactgcaa ataactgttt caaaganatt tatagcacna      300
atatnaattc ctccancaa natctatnat ttgttt      336
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<210> 223

<211> 457

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (87)..(87)

<223> n=unknown

<220>

<221> misc\_feature

<222> (105)..(105)

<223> n=unknown

<220>

<221> misc\_feature

<222> (386)..(386)

<223> n=unknown

<400> 223

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gaaaagttta tttctctcca ctcccaatga caccaagaca ttgtgcatgg tgттаatggt      60
aattgcattc cacagaaaac atgcttncat tgagttcaag ggganaaaat acattcatta      120
tgttacagtt tacataagga agaaaggtaa gattcccaac cccaccttt cgttccccac      180
cactaccaca gacaaaacat ggttttgctt ttaaattctca agacataaca taggggtctaa      240
gcctgtctac tgctacgatg taaaactaac atcatttttc ccttttgctt cttacagatt      300
tttgcatata tgaatgaaac ctcttcccgga aaggaaaaat gggactccaä gctcttaggt      360
ttttatcaat taattcaata attgancctt gggctcttttg gccatcctta ggccctccct      420
gttctgagac taatgcgttc agtcctctgt tgtcgga                                457
```

<210> 224

<211> 304

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (293)..(300)

<223> n=unknown

<400> 224

gatgagttta cacagtaact atgattaaac agtgcaaatt cactgaaata ttttgatgct 60

gagtttacat ttacatgcca aacatttaga aatatattaa gatatgactc actgctacat 120

ggtttcccat ataagatgag tcaaaccatg ttccctaaat aaaatataga cagatgaatt 180

ttggtacaac acagtcacat tataaaatct attttactca tggccccaat atcaacttta 240

aaagggttcc agtatatctg aagaatgaac cagatttttc agtttttaag ccnaccnngn 300

ggct 304

<210> 225

<211> 480

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (48)..(48)

<223> n=unknown

<220>

<221> misc\_feature

<222> (261)..(261)

<223> n=unknown

<220>

<221> misc\_feature

<222> (420)..(420)

<223> n=unknown

<400> 225

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ctgggataag caaagtttaa acatctttgt gtttgtttat agtaagantt ctctgtatat    60
ttaaagtaaa atgtcacttt gtaagacagt ggatagtaag cagtattttc atgtttgacc    120
actgaaaatt ttttttcact agacatcact gtttgtgata cccaagtttg ggaaatgtac    180
taaaacttaaa tacatgaaga tactttgaag ataaaacact gtataaatat ataattagag    240
aaaagatcca gttgctgaaa nttatttctt cttaagtggg aacaatttat agagttaata    300
aagaataatt ttatagtgat tgtaacaaga cagtgccatg ttaatttaac tagtacagta    360
ccgtaattta aaactgtgtt acttcttaac atgttccatg ttaagatgcc ccaaaaatgn    420
taatggattc ttccatcctc tatatactat ttctaagtcc ttgtgtggtg tattctatac    480
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<210> 226

<211> 442

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (56)..(392)

<223> n=unknown

<400> 226

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tctttcaatc aaagtaatta aggtattaca tctcctctgg agctcctaaa ttatananaa    60
acatggtana cgcactttcc atccanaagt ttcatgattt caantttaaa acaaggatg    120
ttttaatagg ataatatata aaaccactaa tacacccttg atttaaaaaa aaaacaactg    180
attttcatat acaattcatg ctatgaagat taaaggcaag atntttgtaa ataatgtttt    240
tacnccaatc tttaaagcca aactactgtg tattcttcaa aaattcttcc ttacttagg    300
nnttaaagca ataaaaatga acatatgcaa tactgctact tagtgngtat gtctgagnac    360
tactgtgcta cttatatcca aaacttaaaa angattaata gtgcacatat gtgagggtca    420
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aaaacaacaa gaacttttac ag

442

<210> 227

<211> 417

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (48)..(48)

<223> n=unknown

<400> 227

atctaattcc attaggggtc acgtcttttc tttctgggac actatccnac tatatccata 60

tctatagatt tcaatataga tgattgtgcc atcttctgta gccctccgc tctactcatt 120

ccttccacca tctgcagaga tttgaagttt ggggctatgc atgaaaccca aactaaatt 180

ttgcaagtca agtaaccaa aaagggggag gcattitgaa gatagaacct ctattttaaa 240

aagagaagtt caactcataa acgtgattga taggtggctg atttatttag gttttgtcaa 300

gctatctatc aaagtaatgg tacagttacc catctactca aatatctgat ttatctcacc 360

atccaattat ctaccacact gtcttcctct ctagcaatct atttactggt tatcaat 417

<210> 228

<211> 467

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (3)..(3)

<223> n=unknown

<400> 228

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ctgtggatca gtcctgcag cacacctgtg cggctctgaa tgcctttatt ttgaatccca	120
ggcaactttg ctggatgagt ccttctcgtc ccaggagaca agacagcaaa ggtggctcag	180
ctcttgtttg tatgctgggt ctgctttgaa cctgaagagc tggatgaagt cttccccaaa	240
gccattggag aagcagctgc atcagaggaa actgtgtcac tgacactttc tcccttctgt	300
ttgcagtgtt gtgttaatca agtgcttgaa aattaagtca gttgctcaag tgccttcagc	360
ttagaagagc ttctgaaac aaataccaga gttgtcaata caccgcat gtaattggcc	420
tccatcagct ttttactgga tagttttcaa acagattaaa ccagaac	467

<210> 229

<211> 532

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (48)..(48)

<223> n=unknown

<400> 229	
aaaatacgta aatacataaa atagttacaa ctgtcaatct tctgggtntt ttttaaccac	60
aataaagaca aattgaacta gttactagac aatgacaact tgcagctttt cgaagccaag	120
ccaaattgct tcaaagtctt ggaagcattg cgagaacata gctgtttaag taggatgggt	180
aagagtacaa gatctgaatt cagacttctt agattcacct ccaagccaat tttctccctt	240
ggaccatagg gaagtcatta catctttcta aaatgcagtt tccctctgtg taaaatttga	300
agcgggtgct acctcctacg gtctttgtaa ggatcgaaca tctaacaggg cgtctgctaa	360
tctaataata tgccattcaa taaaagttga ccagggagcg ttattactag tttaaaatgt	420
gaccaatagt cgcacgcag gttttgaaga gtgggaagag ggcattttgg catggaggcc	480
attgcaggcg tcagagacgc gggatcgaac ccctgtgctg tcaccaggtg cg	532

<210> 230

<211> 515

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (47)..(47)

<223> n=unknown

<400> 230  
gctctacaag atggcgggcgg tcggggccga ggcgcgagga gcttgngtg tgccttgcct 60  
agtttcactt gatactcttc aggaattatg tagaaaagaa aagctcacat gttaaactgat 120  
tggaatcacc aaaaggaatc taaacaatta tgaggtggaa tacttggttg actacaaggt 180  
agtaaaggat atggaatatt atcttgtaaa atggaaagga tggccagatt ctacaaatac 240  
ttgggaacct ttgcaaaatc tgaagtgcc gttactgctt cagcaattct ctaatgacaa 300  
gcataattat ttatctcagg taaagaaagg caaagcaata actccaaaag acaataacaa 360  
aactttgaaa cctgccattg ctgagtacat tgtgaagaag gctaaacaaa ggatagctct 420  
gcagagatgg caagatgaac tcaacagaag aaagaatcat aaaggaatga tatttggtga 480  
aaatactggt gatttttagag ggcccacctt cagac 515

<210> 231

<211> 388

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (10)..(382)

<223> n=unknown

<400> 231  
tgccaatgtn tnaatngnna agnagaaaac agtataaaat tcagtatcan cnatttgtct 60  
caaatacaag tacantgagt attaaacagg natgacaata gagtagcaaa aacagaactg 120

tagatttgcc caaattaant gtttcnccga atttnagggtg tatggcaant tgaatcttgg	180
atctctcagc agttgttaat tacattatca gctgaacgct ttcaaact acgggaggca	240
tttctctgtt canntagact taagnacaca tatactaagc ngtaaanagg ctgccttcca	300
ttagtttggt ctctaagcac tananatatg tcgncttcat atnagtctat gagacncagt	360
gacncccttt tcagaggnat cngtaata	388

<210> 232

<211> 510

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (49)..(49)

<223> n=unknown

<400> 232

accagggtgcc tttagcggtt actaagataa ctgacatcag ttgtttctnt gaaataagtg	60
ttgctgtggg aataatttta atgttcaagg tgatatcatg ggggagtttt gtcttttaaa	120
acattagaag ctttttaaat attaagaatc aaatatttat agatcaaaac ttgtgtttta	180
agtattatac gggacctgtt tacttatagt aaatgtgaat gtacacatga gttgttgctg	240
aagctgacaa gcatattaca tacatgcatt ttccctgtgc cctcatagtt gcagttagag	300
ttccagtacc tgtaggctca cctgggaggc agattagacc caaaggtaga tgtttttccc	360
ctttccatga agcatgtcag tgggagttgc ttcccttgat ttccctagta ctaaatttta	420
aggcttttgt aaaaaccaaa ccaaaactag gagcttggaa cagttaaaaa tcaacactgc	480
taccatccaa ttcatcaaat atttacctag	510

<210> 233

<211> 492

<212> DNA

<213> homo sapiens



<220>

<221> misc\_feature

<222> (169)..(481)

<223> n=unknown

<400> 233

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taaatattac agtgactatt acaagcattt ttctataaac aaagggtgtag ttacagatt      60
tgtgcaaagt gggaaaatat tttcatcagt agtctttctt ccatgggtgtt ggattcaccc    120
ctgaatatga tctgaactct ttcagagagg cagtccttca tctaaatgnc agttggtggc    180
aaaatgttat antcgaatct ggattattct gatacagtgt cactttagaa agtagcttag    240
tttcatttct gattgatccc ctttggttaga ntnagaaatt tnttgaanaa caatcttntg    300
tatntaatga cttttataat annaaaaacc ctgtcctgtg tttctcattg gcattaacct    360
cngtctacac cctctaattc tctaattatg gcaccagtgg gtatagaaag tgaattatgg    420
ttatttggct catgcagcaa attaattgga gaanctggac cgcaaattatt ctgtgaagaa    480
ntacaaggtc tt                                                              492
```

<210> 234

<211> 537

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (160)..(160)

<223> n=unknown

<220>

<221> misc\_feature

<222> (484)..(484)

<223> n=unknown

<400> 234

gtttgaactc ttaaaaaaga gttcctcaaa ctctttttta agaataataca gtgaaatgtc	60
ttaaataata ttatctaaat aatacctaaa gaatgcaaat gacttgcaat gctgaatagt	120
cagacacagg atgttccatg ctaagggtag actcatattn tccactttat aaaatgtggt	180
ttcagaaaac aaatagatgt gtttcttcct taataattag tgtttcagga ccaaagttga	240
ctaaatatgg aagtttaaga taaaacccgg tttcttaggg aatctttctc agtccttagt	300
aattctgtag aattgatgat agagtggcaa cttcaataca ctcagtattc ttttctgttt	360
gaagtctgtt ttgccattgg aaaaaactta ttgttggttg aatttgggta tatgtatcac	420
agatggttta ctttattttt attttggtta aacaaatact ttccgggtccc aaacactgag	480
acangtttca tgtcctaaac actttataaa tattagaata tttaaattccc ctttaact	537

<210> 235

<211> 475

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (23)..(453)

<223> n=unknown

<400> 235

ggctacagac gaaaaaatatc cantatanac anacattact tagataccag tggcatctta	60
aagcagcaca cccanntctc aaaatgcaaa agggnnaaat tttccactcc cacgatncca	120
ngcnnaactc cctngtaaag cacttgctcag gtaaaagata gtgacattgc ctctgttact	180
gtggaanttg gagaggaggt gtgngtgtga agcacatcag taattctctc tcttcatttt	240
ttcatcctct ttttttcccc tcaatttatc tcttcttttc cacaatgtct ctccctttctc	300
catangccca cttcgagctg ctctcncatc cccaattcca acaanaaaga cagctttgnc	360
ctttaattct gttgtttaan atcaatctcn aaattttana caacanacat tcntanacac	420
tactggntca tatttttcana agaatatnch annggcacag aggggggttga aatgg	475

<210> 236

<211> 546

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (475)..(475)

<223> n=unknown

<400> 236

```
acgtcatgca aattgtcatc aaggctgtaa atttcacaag ggcccaggaa ttgaatcatc 60
gctagtttca ggaattcctt aaaagtatgg atgctgactc tagcaagtca ttcacttttt 120
agaagtaaga tggttaagtc aaggcaaaat gtaaagattt tatgctttgt gatgtgaaat 180
caagctgttt atggtatcaa acaaaattgg tgccagaact tgacaatgaa aactggctta 240
cagatttagc attttttagtg ggtttgacgg cccatttaag tgagttaaac ctgtgtcttc 300
aagttgaaaa ccaacttaac aatacaatgt ttcaaaccat aacagcattc catatgaaac 360
tgaaattatg gcaagctcaa attaaggcaa acaattttat gcatttcgac atgttggcta 420
aacatgggtcc tgtgaacagc caaaaatacg cagccttgct tctcaatttg atacnggatt 480
tgaaaacagg tatttcaaga tttctgaaaa atctcaatat tttggtatat ttgcaactcc 540
ttttcg 546
```

<210> 237

<211> 333

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (127)..(127)

<223> n=unknown

<220>

<221> misc\_feature

<222> (301)..(333)

<223> n=unknown

<400> 237

```
acataaaact agtggggtac ttgacattgt ttttgagaaa ctaatccatc agtatctggc      60
ttgatggaag tagttgcaat tctcagttag ttctcaaggt gtcctcaga tatttttggt      120
ctaattntac tcttcgtgtt cttcatcctt gaaaatagta gtcacaaat gtaagtgtg      180
ccaaaaagca atgacatgaa caagggtgtga ttgtgaagca agggatattt gtcattggga      240
agacaggtct taaaaagtc cagtaaagag gcaaaatcaa atttttctat aagttgaaca      300
ncagattgca gctncaggca tncattnaa aan                                     333
```

<210> 238

<211> 557

<212> DNA

<213> homo sapiens

<400> 238

```
gggctggggt tgagctctag atgaggggact ttctgctcc tgcaagggtg agcactgtat      60
acacagacaa ggagggtgca gtagagttag tcccttgga ggaagtagta ccatcagaac      120
ctactattat tatgacataa attctattta catacattga gagaatacta caatcaaac      180
tttttctctg gatgacttta agagggttga gccacagcac ctgaagtggc aaagatccat      240
ggctcttgta ggggtattaga gaactcttcc agtcacctct gaaagcactc tagatcttgc      300
agctgagtgg atgaagtgta acaaactctgt tgcacgctga gaggagtcag aattagcatt      360
tttcatgaaa gttccccacg tctctactaa gaatgaggaa gaaaagacta agactaggta      420
attaccacag aggcttgaaa tggtacatca ccagagccaa gtctctctcc ttcagatcag      480
ttactggctg ctacacaggg acacccccac cttttcaggg catcccatgc actccacttt      540
ctcaggatct aaggaat                                                    557
```

<210> 239

<211> 457

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (297)..(444)

<223> n=unknown

<400> 239

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tagaaatgaa tgtacaatgt atgtctgatt cacaccaggg gaagtggcac agtgcctttt      60
ctgggatccc tacaaagtca aattccttag atcctgagaa gtggagtgca tgggatgccc      120
tgaaaagggtg ggggtgtccc tgtgtagcag ccagtaactg atctgaaggg agaggacttg      180
gctctggtga tgtaacattt caagcctctg tgtaattacc tagtcttagt cttttcttcc      240
tcattcttag tagagacgtg ggggaactttc atgaaaaatg ctaattctga cgccgcncag      300
cgtgcaacag anttggttac acntcannca cgnagcanca agantnngag tncnttnaga      360
ggnnacnnga agagttcnng nagncccnnc aaagaccann gatngttncn acntnaggng      420
cnnnggcncn aaccnnttna agcnaaccna ggaaaaa                                457
```

<210> 240

<211> 302

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (104)..(104)

<223> n=unknown

<400> 240

```
accgctgctt gtcactcact tcatggtatt ttcagagtct cagcctcctt gcaaggattt      60
ctcaaagcat ttaagaatca tataatacag accagttatt ggcntttaag ttttcttctt      120
taataaaata actcagtggc cctaggagaa atctgagaaa ttttcatact ctaaatagaga      180
ttttgcttga aagtaatttt ctccgctggc aaaaaggatt aatactgaca tgaaacatgg      240
```

gaagtagaat tgagtaacac ctggaatttg aaaatgaaag gggcacagag tgcaggcaag 300  
 gg 302

<210> 241

<211> 540

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (519)..(530)

<223> n=unknown

<400> 241

ggaatacctt cagagcagcg ggctcgctca gaggtaatgc tggaaacaca ggtcgtcctt 60  
 gtgttaggac aaccaggat ataaaggata tagatttgta cgggaataaa ttcacaggac 120  
 aagaaatcga tgtgccttat aggtgggttt actgcagaag tgccataata gaaccttctt 180  
 acttttaaaa caaccagatc tcaactttcta aagagtaaag gatgaccggc aggatcacgt 240  
 ctgtgacgtg agtggaggca gtttgcactc ctggtggctg tttgagaggt agcatttaga 300  
 atgcctgtat tcaactgtct gtgatgagtg ggaaaatagg ttatcagggt tatcttagca 360  
 aatcaaagc atgtcatcta attgctaaac aagagttggc aaatctgaga gacattactc 420  
 aatccttggc atgcaggact tactctgcat cctgttgcca tttatgtctt caaagcattt 480  
 aatcatttag ttgtgtttgc aaagtctttg agaagcctnt gtcagaaatn ccctacatct 540

<210> 242

<211> 79

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (8)..(75)

<223> n=unknown

<400> 242  
atatacantc tanggagatg cactattagt ggctncttaa agngaatac acttgtttaa 60  
accttcttct tcanngcta 79

<210> 243

<211> 299

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (47)..(61)

<223> n=unknown

<400> 243  
ggagtcggct aggcggctgg aaacggcggc tgccgccggt gactcangga ggcgggaggc 60  
nggggaggag ctcttcctgc aggcgtggaa accatggtgc tcacgctcgg agaaagttag 120  
ccggtattgg tggggaggag gtttctcagt ctgtccgcag ccgacggcag cgatggcagc 180  
cacgacagct gggacgtgga gcgcgtcgcc gaggggccct ggctctccgg gaccattcga 240  
gctgtttccc acaccgacgt taccaagaag gatctgaagg tgtgtgtgga atttgatgg 299

<210> 244

<211> 524

<212> DNA

<213> homo sapiens

<400> 244  
ggaaccagc tggaaagtgc tgtggaagga caaatggaga aaagtctcca gaaattggcc 60  
tcgtttgaaa ggacctcatg caaagagaga tctttggaga catttcagaa aggtttttat 120  
tcaaacatat tcgcagcttg tatgacagtg gaatgttttg aaatgagctt gattctgttt 180  
accatcctt cttaatccaa caactctgct ggtctctctg ctgacacaag atcgttcgca 240

ggttatagaa ggatttaaca cgtcagcaac agggagctgc caccaccgtg tactgtgctg	300
ctgtcccaga actggagggg ctgggagggg tgtacttcaa caactgctgc cgctgcatgc	360
cctcaccaga agctcagagc gaagagacgg cccggaccct gtgggcgctc agcgagagggc	420
tgatccaaga acggcttggc agccagtcgg gctaagtggg gctcagagcg gatgggcaca	480
cacaccgcc ctgtgtgtgt cccctcacgc aagtgccagg ggct	524

<210> 245

<211> 576

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (36)..(36)

<223> n=unknown

<400> 245

acagcaggag gtttaagtac aatgtgaaag caaganaact gagactgtga ttgacagaca	60
aagggattaa ctaacgtttt attctctgcc ccccaaaata tctgtgtat tcttaagtat	120
atacgttcc cttcctgctt ttcaagggtat ctaaggaatg atttgaaaaa tttgttataa	180
tctctaaaga attttttgcg tagcattagc aaaggagtct atgacaagta ctttgccacc	240
tggtagttct gcgtattcta ctccctctgg gtgtcactgt catcctcact ggctgggaca	300
aggttctgag atttgtctcc ccagcagttg ctaagctggc tcagtcttgg tcaggatgaa	360
tgaaacaatt atctcctgga tcaatgcagc aaggagcagt gaacacttgc tttttcttcc	420
ctaagtagga gaaggccagc ccccggtctg agtggtggcc gtggtggtag ctggatggga	480
cgaggggacc tcaggctatt ctataacagt aaaagaaaga gaattgctgg tgcttctcca	540
gggagatacg gaacctacac accaagcagg ttttac	576

<210> 246

<211> 436

<212> DNA

<213> homo sapiens



<220>

<221> misc\_feature

<222> (378)..(378)

<223> n=unknown

<400> 246

```
gcagttcttt ataatttaaat attctatttt aataaaggcg tttattacca tataaatgta      60
gcaaagaacc tgggctaata tgaaaaaaaa agacttttta ttaggtaatt tattatatga      120
aaaggatatt ttattttatg ataaagtgat ccttaaaaaa ataaaaaac tttagaaggt      180
ttagaatata ttaggggaga gaagaagaaa aaaatacatt tgtattcaga gttaaacttt      240
aaaaaaaaaa agtggttttta atatatgttt ggggtttacgt tgcttttttc cccactttt      300
tttttgggga ggaatgtcat ttgcttttct tgggggagca tcccgggggt gaatggtgga      360
gagaggagct gggggaance ggtccctcct gggacccttc cagtagattg gatttcactc      420
catggactcc tcctcc                                     436
```

<210> 247

<211> 358

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (130)..(130)

<223> n=unknown

<220>

<221> misc\_feature

<222> (246)..(246)

<223> n=unknown

<400> 247

gtccaaaact tgtgagaaca tacaatttaa agttgaaaac tcatcatttt gggctatttt	60
tgaatagggc tgaaatatgg tgacatgtca ggcactcagt tttttggagc tgtcttaaag	120
gtgaggtggn aagtgagaga tgattttgct ctaattaccc acacattctc cctaaccctc	180
cattttaaga cacttagcta taatagctta agactatcaa aactgctttt gtgattctca	240
gtaggntcta gttcaaagcc atctcagtgc tagtgattgg taattgtaa tttgatggta	300
attaccctac ttgtaaagtt gacattcata ctggctaatc ctccctgccc ctagtcgt	358

<210> 248

<211> 276

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (10)..(269)

<223> n=unknown

<400> 248	
tacaaaaggn ctaattttat ataactatga ggttcttnta catcagaata atatataaac	60
anaggtgnaa atctggtaat tacaaacaca gaaaatanaa accttgntcc cttatttatt	120
actcaccttt cagaacaagt cctnggctca gtngtagang tngggaagan cancacntac	180
ngaagtttnc angnngngnc ncccaaanat gtctataaat aacncattta gntaccctaa	240
ngaacagcan tggcnantag catcaangng tggctt	276

<210> 249

<211> 354

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (308)..(338)

<223> n=unknown

<400> 249

```
aataaacttg aagatactat tacactaatt aaaggaaaga ttgaagaagt tcatcttcct 60
gtagaaaaag tagatgttat catatctgag tggatgggct attttcttct gtttgagtct 120
atggttagatt ctgtccttta tgcaaagaac aaatacttgg caaaaggagg ctcggtctac 180
cctgacattt gcactatcag ccttgtagca gtgagtgatg tgataaacat gctgatagaa 240
ttgctttttg ggatgatgtc tatggcttca agatgtcctg catgaagaaa ctcagttatt 300
cccagaancn gttgtggaag ttttagancc gaaagacncc ttatttcaga acct 354
```

<210> 250

<211> 122

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (17)..(120)

<223> n=unknown

<400> 250

```
gaagacttat ggcaaancaa tgcaaataaa aaataacaaa taataaaggg gnnatggcat 60
tttagacttg aactaccctt tcagtacatt tgcataact aaagttctng aaaacaattn 120
aa 122
```

<210> 251

<211> 238

<212> DNA

<213> homo sapiens

<400> 251

```
tcggaaagga atccacatca tattggagat gaccccatca accccagggc tccagcacta 60
ccaagttgga attccacgcc cgggagtggg gtagaggaag acgagacagg acgaggcaga 120
```

aaagcacatt ttaaaaacca gacaagatgg ctaggccatc accaaccaac ggacttacct 180  
 tacatctttg taggtaattc cccccaatc ttgatttttt ttttctcaa ttatccct 238

<210> 252

<211> 464

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (394)..(394)

<223> n=unknown

<400> 252  
 ttggagtgaaggatttggt aaagattcca taacaggatc tgggttagag aatgcaacca 60  
 tctcagtggc tggattaat cataatatca caacaggcag atttggtgat ttctaccgat 120  
 tacttggtcc tggaacttac aaccttacag tagttttaac tgggtatatg ccattgactg 180  
 ttactaatgt agtggtgaaa gaaggaccag ccacagaggt ggatttttct cttaggccaa 240  
 ctgtaacttc agtaatccct gacacgacag aggctgtatc aactgctagc acagttgcta 300  
 tacctaatat tctttctgga acatcatcct cctaccagcc aattcagcca aaggactttc 360  
 accaccacca ttccctgat atggaaatct tctngagaag gtttgccaat gaatatcta 420  
 acattacccg gctttattcc ttgggggaaat cagtagagtc aaga 464

<210> 253

<211> 475

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (307)..(307)

<223> n=unknown

<220>

<221> misc\_feature

<222> (469)..(469)

<223> n=unknown

<400> 253

```
gtctatctgt attgattatt agcacttttc ctaaaatagt tgtctgcaag ggctaatttt      60
ccctgctaaa gaataagaag ttataacaat tgctagccag ttagtagaaa gcgggaaagt      120
atagctgaga aatgattatg ttagcctgta ccttacagct cttaccactt acaaagaact      180
ttcatgtaca tgatcgtggt agattttttac aaccactctg tcctataagt aggcctagga      240
gctaccatta aagaaggcag aatttattgg aaagcatcct ggatctggag taatgagacc      300
agggcanggc tgcaccctga ttatgccacc tcagccaagg tactggacct ctcagagcct      360
tgatttcctt taaaggaat gatattggcc ctacctcaga gagtaacta caagattaca      420
tttgtaacag cacctccgtt taatagatgc ttaatacata agaatakana tagtc          475
```

<210> 254

<211> 428

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (160)..(160)

<223> n=unknown

<400> 254

```
caagaagttc ctttaaacct atcaagaata aaccatcaaa gtcaaataaa ggtagtatag      60
atcaatcagt gttaaaagaa ttaccccttg aactcctggc agaaattgag tccaccatgc      120
cactttgtga acgtgtgaaa atgaacaaac gcaagcgtan acagttaatg aaaagccaaa      180
atatgctgaa atcagttcag atgaagataa tgatagtgat gaagcttttg aatcctctag      240
gaaacgacat aaaaaagatg atgataaagc ttgggaatat gaagagcgtg acagaagaag      300
```

ctctggggat cataggagaa gtggccactc tcatgaagga agaaggagtt caggtggtgg	360
tcgttatcga aaccgaagtc cgtccagatt ctgacatgga agattattct cctcctccca	420
gccttagt	428

<210> 255

<211> 437

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (60)..(433)

<223> n=unknown

<400> 255	
tgggaggagg agaataatct tccatgtcag aatctgacgg acttcgggttt cgataacgan	60
caccacctga actccttctt ccttcatgag agtggccact tctcctatga tnccagagc	120
ttcttctgtc acgctcttca tattcccaag ctttatnata anctttttta tgcgtttcc	180
tagaggantc aaaagcttca tcaactatcat tatcttcanc tgaactgatt tcagcatatt	240
ttggcnttca ttaactgngc tacgcttgcg tntgtncatt ttcacacgnt cacaaagtgg	300
catggtggac tcaatttctg ccaggagntc agggggnaat tcnttnaaca ctgattnata	360
natacnacct ttatttgact ttgatggntt antcctgata ggtttaaggg aacttcttnc	420
tcgagcngaa ttncgag	437

<210> 256

<211> 349

<212> DNA

<213> homo sapiens

<400> 256	
gcagaattga aattggaata caagggagca agagtggatg ttggcacacc aatcaaaaga	60
ctgttgtacc agtccaggta gtttgggatt gtggaaatag agaatttata gatttgagga	120
aaatttagga gataaataaa caggaatttc taaaacaaac tgaatgagaa agtgtcagag	180

atgtctccag aattttttga cttgtgtaaa ttaataaata ttagtgccag ttattaaatt 240  
 ctgaaacttc atgagatcta gatttgtatt atgaagttag ttaatttta catatgttga 300  
 ttttaagggtg ccaatgaaat ctccatttgg aaatgggtggt taggatatt 349

<210> 257

<211> 225

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (20)..(213)

<223> n=unknown

<400> 257

tgccttatca atatcctaan caccatttcc aaatggagat ttcattgnca cctttanaat 60  
 caacatatgt aaaattaaac nnacttcata atacaaatct agantcatg aagtntcana 120  
 atttaataac tggcactaat atttantaat ttananaagt caanaaattc nggagacatc 180  
 tctganactt tctcattnca gtttgnntta ganattcctg tttat 225

<210> 258

<211> 429

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (344)..(393)

<223> n=unknown

<400> 258

ccctcgcgga tgggcagggtg ctgtagccc ttggcctgga aaccacctg tctcctcagc 60

```

agcctcctga gccgtagtcc cccaaagggc agcccagcgg caatatctgt ggccacccca 120
ccagaaaggg acttagatcc ccagagagcc cggcacggtg ctctgccat catcacccct 180
cctgtccctt gttcattcag tcattcagca agcatttcag gccctgttct gtgccaaccc 240
tgtgctgggc ctgcgggtac caaggtgaat caggcatggt gccagccccg gagagggtccc 300
tgacctgtgg ggagacatac cattagcaca cagacaacga aatncaggng tcctttcacc 360
tatatgtgcc aaacgccctt caaggctcaa ggntacagtg gaaacagata aggttctccc 420
tggtctcct 429

```

<210> 259

<211> 549

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (6)..(540)

<223> n=unknown

<400> 259

```

tcttanagtt ggnatgaacc tcagaaattc cttatctctt ccatttccca gataaganag 60
tgagactggg agataggatt gactttccta agaccacaga gtngnnnnngg aggagggact 120
gagttggata ggtcagtttg ggcagcaaga cgggcttcta tctttatccc acagtcccag 180
gcaccattgt gcttgacaca gaatccaaac tcccagctgt ggctacaaa gccctggtga 240
tcagggcctt gccaaactcc tccagcctca cctgaggcac ccaactcctc cctgtcatca 300
ggccccggcc caccttgatt gccattccct ttgccaagaa tgcccttcgg cctgatcttc 360
atgggtcagg atccatcttg ccattcagtg aaatgtcacn tcctctgtga ggccttgcct 420
gatcacctct acagttaccc ccattgctct canctggggg ctgttttggt ttttccatag 480
aagttatgat gacctgnaat aatcttttgg tgttctctgc tttttgtgtg taacctcntn 540
caacctaag 549

```

<210> 260

<211> 474



<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (25)..(473)

<223> n=unknown

<400> 260

```
gtgaaatgct ctagcaatga agcanggnag gnagangggg gaaaggaaat ttgagccaag      60
caacctgaag gtcaggggaa gccgggtctta cagatgttaa gggaggaatc caagtaggca      120
aaggggatga acagcagtgc aaaggctctg gggcagcagg ttgcccggta tgttccagaa      180
caggaaggcg gccagtgtgg ctggcatgga gagctaaggc tcaaaggaga aagtgaagag      240
aaagaggtag taagggacca ggaggaattg agcccggcca gccgtgctac tgatgttagc      300
ccacatgtca cagtgtgtga gggagataga gtccttgga acaataatat gcagagcttt      360
taaaaacttt catactgtag ccatcaattc catcatcatg gtggtggtat ccctgggtgg      420
tggtgggtta cttggtagag tatacgtcaa cncgnatttc ttctccaaa agna          474
```

<210> 261

<211> 520

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (5)..(495)

<223> n=unknown

<400> 261

```
attcnnnagg cntgccangn ccacatcctc tctctacaga cngggaaant ntctccaaca      60
gcaggagcca ggctcaacgg cggggcaggc atatacatgg cctancatct tcaggcctca      120
gattttccat taaaaaacag ggataacaac aagatccaac cctacgcata ggtnattggg      180
```

attcaatacc atttttaaat gtcttatgaa ttataaggta cgcnaaaac gttaagtttt	240
cagaataang catgtcattc catgattaca aacttggtgct tttgttttgc agtttatcct	300
gtaagcacgt cccagtagtt tccccaacct caatgggtacc tcagcgtctt cattccacta	360
gntcacttct aggtctttttt caaattttat atacttttga ggaagaaatt cgagttgacg	420
tatactctac caagtaacca ccaccacca gggatancac caccatgatg atggnattna	480
tggctacagt atganagttt ttaaaagctc tgcatattat	520

<210> 262

<211> 466

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (462)..(462)

<223> n=unknown

<400> 262

ctcagattaa ctctctcaga taaagtgtca gcggtctgca gaaacgaaga agacaaaact	60
gagattatca ctcataattc tcttacttac tatgtcagtg aaacaatgag tttgcatttt	120
tgcaatccta gaacattctt cattagccct gggcatgac ctcttccagt taattctctt	180
tcacaccttt aggaaagatt taagatgaac cttcaatagg atattaacat aactcatagc	240
caataccaca gctgcctttc aaattaatga ggttaattgt tctccagcaa acatgagttt	300
gtctttggca ttttaaagtc ttccattga tctgacattt tgctgtttca agttttaaag	360
ggctcaaatac aaagactatt gataactgag caaagagcga agatccagaa atacgaaaac	420
attgtctttt tttttccatg aaaaacaatc atagcctttt gnattc	466

<210> 263

<211> 500

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (438)..(438)

<223> n=unknown

<400> 263

```
aaatgaaatt ttctgtatt tacatTTTTa caccatatga ccgggcactt ctgttgccctc      60
aggagttata tacatatcag tttgcacacg aatttcaatc cccattcctt aaaacagttg      120
ataacacatt gaacaaaatt aaaagacata ctacaagaag acaaccatag tatatacttc      180
ctctatcata gaaagggtgtt aagcaaacat ataattttgt agctatgctt ggaaatattt      240
aatacactta ttagcacttc ctcatgcagt ggattaaaac atgacagata taaactgctg      300
cagttgatca gtgaacatta attcccaaatt gaagaccatt gcttagagca gacagcttgc      360
tttcagctcc accatacaag acatcaagtc agttctgatg tgggttttgg attctgtttg      420
aatgtagctg tgaatagnaa ccctctgcat atggagttca atcctagcct tgttgggtaa      480
aaatggactc agacataaac                                     500
```

<210> 264

<211> 486

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (81)..(461)

<223> n=unknown

<400> 264

```
cagtgacttt aaactaaaga acttaattaa agaacattgt tcccataggt taaattttta      60
ttcttattta aacatatttt nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnntatag ggtcattttc atgggtataa      300
```

taaaaattat atacaagtat aaataaaaatc ctgagtctta aaattctgag tcttgettaa	360
acatttttaaa aattntgtta tgtatttttc tttgaacatg tctctctgcc tggcaaaaca	420
taaccagaat tttagtattg gttacataga gttactata nccataatat tactctaaaa	480
ataaat	486

<210> 265

<211> 561

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (288) .. (483)

<223> n=unknown

<400> 265	
caatattgct cttttctttt gaaaataggt acaaactcac actcacacaa aaacagtcca	60
taactttctt gcaacttaaca tttattttta gagtaatata tgggtatagt taactctatg	120
taaaccaata ctaaaattct gttatgtttg caggcagaga gacatgttca aagaaaaata	180
cataacaaaa ttttttaaat gtttaagcag gactcagaat ttttaagactc aggattttat	240
ttatacttgt atataatttt tattataccc atgaaaatga ccctatannn nnnnnnnnnn	300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn	360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn	420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn	480
nnnaaatatg ttttaataag aataaaaatt taacctatgg gaacaatggt ctttaattaa	540
gttcttttagt ttaaagtcac t	561

<210> 266

<211> 409

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (344)..(344)

<223> n=unknown

<400> 266

```
cacatgctga tgacaaagaa gcttggtttt ctgggttttag tctcaggggtg gggttggagg      60
tgaggctggg gtcccccta gctttatact tagaaaccct gcctttatta gggtttgaga      120
aatgaattta cattccctgc tcaaccagg agtcatgaag tccaaagact gacagaatgg      180
tcctgggtgc attaaacctt tgagtcacct ggcaaaaata aatctaaaag tcaccaagaa      240
agctgcaggg ttggcatgga taaaacactg ctgcagggtca gctcacagcc cgcagattct      300
aaaacccta tgctcacagc ccaccatggg tacgagttca ccgncataac acacaggaag      360
gagttcctta gatccccaag aatttgagtg tttcacgtat cctacaaga      409
```

<210> 267

<211> 356

<212> DNA

<213> homo sapiens

<400> 267

```
gatgaggtgg aggaagatgg aggtgaggct tggctgctga ggcacccaag tgtgaccaa      60
atgccacag agagccaacg tgcactaaga gctgtcctc ctcttccttt ttttctacc      120
ctcgacctca gtctgcgttt tgtgtcaggt tgactgttct gaatcccaa gacccagtt      180
atctcaagga gaagcattca ttttccggag aattcattag aagtcaattt tgtttttatg      240
caagtaggaa aaaacttgca cagctgcccc agctcttcag gaagagccat tcaaaagcca      300
gatcatccag aagggtgacc ttctggaggt ggggataacc gggcttagtt gaagtt      356
```

<210> 268

<211> 278

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (246)..(246)

<223> n=unknown

<400> 268

```
gcccttacta ttaacttacc acctgtggtg cagaaatagt atgttcaagc ctatcagctt      60
ttgagaagat tccagatttc attctcatat gaaatggcca ttccatatgt cattatcatg     120
ttgagatgta ttaattcact aagtttttat aaagtatatg tagatatata ctaacatctc     180
agagcttcca tcatggctcc aaaccattta tcaaataaag ttcatcaaag tcacaatctt     240
cagatnataa aatgaataca aaatttatta agtcgtta                               278
```

<210> 269

<211> 365

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (200)..(200)

<223> n=unknown

<400> 269

```
cctcctcttc tcagctccct tctgctggga gcacctggct gccagttccc aagttcctct      60
ccatggggaa ttgcagctcc aagggtggcct cctggagctg cctaactccg ccttcactga     120
aaataagggtg attgaactgt aaagctgaaa tcctctgcag tcatgtctcc tccagagtct     180
tcaaggtcac tcccactttt tttctagaca caaatggggt catttttgta attctaatta     240
acactgtctc cagacataaa taaaatttta aatttctcat tgctatcagc tgtttccact     300
atgtttttca taaattggaa tgcaatttta aacagttaat aaaattctcc agtacaagag     360
caaaa                                              365
```

<210> 270

<211> 260

<212> DNA

<213> homo sapiens

<400> 270

```
acgtgtgtat tcatacagcct ctgcaatcaa gttcctgagc cctgggcatt tcacctatTT 60
agtgttctgt ctgcttttgc gtgtaaggaa gtgcctttta ttaaaggctg aacattttta 120
atttcaggga aagccagagt ccaggctgaa acccaciaat accatggcaa cctatttagc 180
actcttgaca cattactacc ctaatgaaga catccttgct aatgccagag ccaaacagct 240
atttattaac tcagcctaac 260
```

<210> 271

<211> 389

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (75)..(75)

<223> n=unknown

<220>

<221> misc\_feature

<222> (355)..(355)

<223> n=unknown

<400> 271

```
aagactttgg ttttatattc agtaaaatga ggcacccttg gagggctctg agtaaagcgg 60
agacagaatc cgatntcccc ctctttttaa gggactctctg tctgctgtgc tgaggataaa 120
ctgtagacta tctcaaagcc agttgcatag tattttatTT ttcttattta atattgccca 180
gatatttaag ttcttatctg ttgttacctt tggaagtttt cattttttta catctactct 240
ctacatttta ctcttttctg attataaaat taatatggat cattgaggaa catttacaat 300
```

tatagacaag cataaataaa taaacacctt ccaaaaatcc agaatcagag acaancactg	360
ttaatatatta gtatatcca accatTTTT	389

<210> 272

<211> 587

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (344)..(581)

<223> n=unknown

<220>

<221> misc\_feature

<222> (12)..(12)

<223> n=unknown

<400> 272	
ataactcaag antctacaag aaaataatca ttgattttcc tctagaaat ccattctaag	60
gatataatct aaagtgtaga cagagagcta tgcacacagt aataagagaa agaaatgaaa	120
acaatttaaa tgtcctcaat taggagaata tctatatgac agaatgttta caaagagttc	180
ttgattacac cggaaaagac ttaagatatt cattttaaaa cacaggttca ataataataa	240
gaaaaaagac acagaaaaat ggttggaata tactaaatat taacagtggg tgtctctgat	300
tctggatttt tggaagggtgt tctatgtatt tatgcttgtc tatnatngna aatgttcctc	360
antgatccat attaatttna taatcagnga agagtaaaat gtagagagta gatgttaana	420
aatganaact tccaaaggta acaacagatn agaacttaaa tatctgggca atattanntg	480
aganaaataa natactatgc tactggctng agatagtcna cagtttatcc tcagcacagc	540
agacagggta ccctttaana gngggggaga tcggattctg nctccgc	587

<210> 273

<211> 465



<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (430)..(430)

<223> n=unknown

<400> 273

```
gtcttttatt gttgatttct catttggtta ggtcggcagc acagatcatg gtctatatgg      60
ttggttctta atatgtattg agacttcttt tatagagtat tattttggaa ataactccatg     120
agtacctgaa aaaatatcta ttattttgtc atattttccc ccaaaggtag gcatgtcagt     180
ggtgataagc taatatctct aaaaactttg taatagtaat ttttaatggt tgcttttagta     240
ttatagtgca tttctactag aattagtatg gtaattctct ctaaaggctt aaactttgct     300
gtctcatttt acctttttta cccccagggt aaccaaatat tctttaggcc atcatcattt     360
gtcagtgaag tgggtgggatt ggggtggagag ggatatgaag cataactaac acatgcattt     420
ctttaaatan cacttgccag cccagaagt gtgagccaga ctttg                          465
```

<210> 274

<211> 578

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (125)..(372)

<223> n=unknown

<400> 274

```
gctaactgta cactacgtac taatgatgtt caattatttt atagaagaag tgtatttcaa      60
tatgttttta aatttttaag taagcttctt tgtgaccaa aattaatcac cattgatgat     120
aatgnagatc tttaaacctg ttacaaatca gttgacaaat ttaaatttaa tatcttttat     180
```

taagatagaa ccctgagtgt atacaanatg caacattaat attccacata ttcatatagt	240
aagttgctta tctaggagag ggtantttca gtgctaaatt tgggatttta cctacattcg	300
taactcctcc catgtgattt ttaatataata tgtnaataac aaagtctggc tcacacttct	360
ggggctggca antggtatat aaagaaatgc atgtgtaagt atgcttcata tccctctcca	420
cccaatccac catttcactg acaaataatg atggcctaaa gaatatttgg ttaacctggg	480
ggtaaaaaag gtaaaatgag acagcaaagt ttaagccttt agagagaatt accatactaa	540
ttctagtaga aatgcactat aatactaaag ccaacatt	578

<210> 275

<211> 483

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (201)..(470)

<223> n=unknown

<400> 275	
agaaaacctt ttgaaactgg cacaaaggca ctgggagaga ctggcagggc cccctacttg	60
acgatctggc tcatccatct gcacactgac cacgctaaga gctgtctgca gtgatggaaa	120
ccttctctag ctgtgctgtc ctctatagtg gcaccagctg cctgtggcta ctgagcactt	180
caactgtggc tgtagagact nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn	240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn ngtgcacatt tcctgctggc	300
catggacagt aagctccata agagactaat tgtgcttggt ttgcttatag gcttatactc	360
agcacctgca ccagcctaga atatgattgg cactctatta attaaaagtt cccaggtaaa	420
tgaattagtg gattctctgt ttcctccact atggccacaa cctccttaan ggcagagatg	480
gtg	483

<210> 276

<211> 444

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (5) .. (246)

<223> n=unknown

<400> 276

```
gaggnaacag agaatccact aattcattta cctggnaact tttaattaat agagtgccaa      60
tcatattcta ggctggtgca ggtgctgagg ataagcctat aagcaaacca ggcacaatta      120
gtctcttatg gagcttactg tccatggcca gcaggaaatg tgcacnnnnn nnnnnnnnnn      180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      240
nnnnnnagtc tctgcagcca cagttgaagt gctcagtagc cacaggcagc tggtgccact      300
atagaggaca gcacagctag agaaggtttc catcactgca gacagctctt agcgtggtca      360
gtgtgcagat ggatgagcca gatcgtcaag tagggggccc tgccagtctc tccagtgcct      420
ttgtgccagt ttcaaaaggt tttc                                         444
```

<210> 277

<211> 406

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (330) .. (361)

<223> n=unknown

<400> 277

```
gcttgccctg gcttgcacag ctggtccacg agctggatct gtggcagggc tttcagcggg      60
ggccagagct tgagcttcta aggtgctcct gctctcgtg acagcctcag agggcctggg      120
gcagagaggc cccctctgct tctcctgggc tttctccctg agcttcttgc aacacctccc      180
tgtgagcaca catcttctctg gtggggcccc ttctgcttcc gctctagggg aggctctgtg      240
```

gcttgggtct gggggccacc gttggggatg cggatggcca ggagtggggc tgctgagcgc	300
ctgggctagt gacagcctgc ctccaaccan tcccagaagc cctgctggaa tccccacct	360
nttccgaggc taggagcatc tgccctctcct caaacttcat acagtc	406

<210> 278

<211> 416

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (57)..(404)

<223> n=unknown

<400> 278	
aagggtattt ggtgacagga acaatgggcc aagggtgggg actgtatgaa gtttgangag	60
aggcagatgc tcctagcctc ggaagagggtg ggggattcca ncagggcttc tnggantggt	120
ttgaggcagg ctgtcactan cccaggcgct cagcagcncc actccnggcc atccgcatcc	180
ccaacggtgg cccccagacc caagccacag agcctcccct agagcggaag cagaaggggc	240
cccaccagga agctgtgtgc tcanagggag gtgttgcaag aagctcaggg agaaagcnca	300
gganaagcan agggggcctc tntgccccag gccctctgag gctgtcagcg agagcaggag	360
cnccttagaa gctnaagctc tngccccgc tgtaaanccc tgcnacagat ccagct	416

<210> 279

<211> 543

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (451)..(529)

<223> n=unknown

<400> 279  
caagcagtaa tctgagtggg acgcagggaa tttggtgccc cagaaaaaat gtgccaggtt 60  
ggcctggtct gggagtaccc agggaggctt ttcaggaggg gacacataaa ccatttcctt 120  
gaacaaactc atcatgttca ggcaggcact caaggccttc tcagtggctt tccagacttt 180  
tttctgactc ttgcctttgc tacagccgga tgggccaggc accactctgg gctctccoga 240  
gctccttcca cctctctcct cctctcaacc cacaggacat tttacaggat ctgcttctca 300  
cctggaatgt ctctctgac tcctctcctt tctgtttcaa tgtgctttcc catttcttaa 360  
catccaatga taattccctg tgggtcagtc tctcccttc tcaccaccaa tggcccttgg 420  
gatctgatcc actcattggc cagttaatgg ncttggtgag ttggaaacag catttcattt 480  
attanatann aattatagan agccatcagc ctaggcaaca cagtgaganc ccccttctgc 540  
tac 543

<210> 280

<211> 511

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (237)..(341)

<223> n=unknown

<400> 280  
ttctataatt tttattttaat aaatgaaatg ctgtttccaa ctcaacaagg ccattaactg 60  
gccaatgagt ggatcagatc ccaagggcca ttggtggtga gaaggggaga gactgaccca 120  
cagggaatta tcattggatg ttaagaaatg ggaaagcaca ttgaaacaga aaggagatga 180  
gtcagaggag acattccagg tgagaagcag atcctgtaaa atgtcctgtg ggttganang 240  
angagagagg tggaaggagc tcgggagagc ccagagtggg gcctggacca tccggctgta 300  
gcaaaggcaa gagtcagana aaagtctgga aagccactga naaggccttg agtgccctgcc 360  
tgaacatgat gagtttgttc aaggaaatgg tttatgtgtc cctcctgaa aagcctccct 420  
gggtactccc agaccaggcc aacctggcac attttttctg gggcaccaaa ttccctgcgt 480

cccactcaga ttactgcttg cttcgagccg a

511

<210> 281

<211> 466

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (205)..(205)

<223> n=unknown

<220>

<221> misc\_feature

<222> (411)..(411)

<223> n=unknown

<400> 281

gtgatactct tatgaatatt aatagcaagg ttattccatc tgtgctatgg gatcttgctg 60

ctgctgctgt tgggttttat gttgtttcca tggcagggga aggtagatgg taggagtgag 120

tggttttttag ttgtgagctt tttttttcct tgagctataa atatttaaaa gaaatttgaa 180

tattaatatg cttttctggt tatgntcatg aaatgcttga attctctatt acttcttttt 240

aaagcaagca actaaataat cataattttt ctcttaaatt ttgcctgcct cacagttttt 300

acagtgtgaa actgatagca ttgtcaaac aactctgaca ttctgaatta catatacaca 360

ggaaactgac aaatgtttat gagtacctgg gatttgggtt tttcttttaa nctatgtatt 420

agtactataa ttactagtta ttttgagggc agaatagtaa ctgtgt 466

<210> 282

<211> 484

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (3) .. (3)

<223> n=unknown

<220>

<221> misc\_feature

<222> (212) .. (212)

<223> n=unknown

<220>

<221> misc\_feature

<222> (35) .. (478)

<223> n=unknown

<400> 282

ttntttattg catccatgtg aaattccttg aagttttctt agagtatatg gaatctttat	60
gataaatcca taccatatca gaaagtatac atgaaagttc tagttatatac attgtgctac	120
taagagttta acctatatgg agatcagtta cacacagtta ctattctgcc ctcaaaataa	180
ctagtaatta tagtactaat acataggtta anagaaaaaa cccaaatccc atgtactcat	240
aaacatttgt cagtttcttg tgtatatgta attcagaatg tcagagttgt tttgacaatg	300
ctatcagttt cacactgtaa aaactgtgag gcaggcaaaa tttaagagan aaattatgat	360
tatttagttg cttgctttta anagaagtaa tagagnattc aagcatttca tgatcataaa	420
cngaagaagc ntatnaatat tcaaatttct tttaaatntt tatagctcan gganaannaa	480
agct	484

<210> 283

<211> 503

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (452)..(486)

<223> n=unknown

<400> 283

```
gtggttctct ttctttgcag tggcacattg ctaaattttg gcacatgatg aagaagatgt    60
ctcttcagtt gcttaagaag tggggagcaa agagaggtag agggaggtga aacttataaa    120
gggaaaggca ggaggaaggt tgccaatgca ccttctagcc ggaagctggt gtggctgccc    180
atgcctttta tgacaaacca aacttaacca tgggccattt gtccctgtg gctccctttg    240
tgtttctcgt ttctcgtcta tgttgatggc actcctgctc cttgtttctt gatgttcctg    300
catgctaaat tatttcaggg cagtgaagc catctcaact cctagttgta ccaaagcaga    360
aatgtcaact aaattatctt taatgaaatc attttctttt ttaatcatag agtcaaccaa    420
agtggagaaa aaaaagattt gctttaattg cngccacttg gaacacccag cctgggggta    480
aacatncttt catcttgcat gat                                           503
```

<210> 284

<211> 375

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (17)..(362)

<223> n=unknown

<400> 284

```
tgacagcggg gttaganang gntaggtaga acctatatta cgganntcag ccttgcccat    60
ttcttttagtn cagtgattaa aattgaaatt acttttacia aacaattgaa ctgctgctta    120
caatataaac agaataccaa caggattcct gttgtattca cattattctc taattagtat    180
ttttacattt ccactttcnn tccagaacca angccactgc cttagcccaa ggtcanctgt    240
gngtgcctan gctcttgcaa cagtttccta gctgggtgtcc cttgantgcc gtcttttnta    300
```



acacaatcca tcnctcacac agccacaggn ttgtctcant ttcancacag cctgcaacat 360  
ancattctgc tttaa 375

<210> 285

<211> 385

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (13)..(13)

<223> n=unknown

<220>

<221> misc\_feature

<222> (204)..(204)

<223> n=unknown

<400> 285  
ggctggcaca gtngaggggg aatgtgcctg acttgtatat aaaggcagca cagtggctgg 60  
gcaagacaca cattgtggac agaaccaagt ttatggacca gccttccttg tgaaatttga 120  
cttttccttc tttgctgaat tggtcagggt aacaatgggt acccctggat tacaggaagg 180  
gcatgtgcta aaagcctcct tgcnagaccc acatggcctt cagatgagca attgttcaga 240  
ttccttttct ttttcttttc catgggaata agctttcctc tctccaaagt acatgtttta 300  
ggctttttta ttttcttgct actcccaagg acctggtgat atttttcttt accatgcatt 360  
aaacagaatc tgtgagtctt ttctg 385

<210> 286

<211> 217

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (12)..(217)

<223> n=unknown

<400> 286

```
atcaatatca cnanntcett gagnantagc aanaaaataa aaaagcctaa aacangtact      60
ttggagagan gnnagcntat tcccatggaa nananaaaga cgaggaatct gaacaattgn      120
tcatctnagg gccatgtngg tctccaagga ggcttttagc acatgccett cctgtantcc      180
aggggnacc attgntancc tnnccanttc agcnaa                                217
```

<210> 287

<211> 415

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (336)..(336)

<223> n=unknown

<400> 287

```
ctttttttgt tgggtattgt ttgtttacat tggcactatt ttatcttggc actacttttc      60
agatttgaat catgttttca tactttggct gccttgtctg ctggttttcg tgtggctttg      120
tcttttagaa tatcttggct ctatcttata aagagagaga ccctgggtag aagagtatga      180
ttaagtctat caatatcttg gttcattatt gccagataat ggcaggagaa ataggctctg      240
caacccaage cagttaattt tgctttttgt taaaagcttt attgaaaggc caattaggat      300
aataagatga agggaagggt atctttcaat attagntatc agtgtaagat ctcttttttt      360
ctctagtatt atgggacaag tttaagattg attcaatatg gggagaagca tttta          415
```

<210> 288

<211> 593

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (550)..(550)

<223> n=unknown

<400> 288

```
tattgtatta ggtgctttcc tacattacc tttctgtggc attaaatgta ttttcaaaag    60
atgaattatc aagaggggatt attcaaatta gagaagcaca cacattacca acattattgt    120
ttttaaataa tttatgttca aagagtgttg ttaaaaatgt acacatttca ataccaatct    180
gcatatgcag catttaacca aaaaatttta gagcaaatca tactaaattg aagagtcattg    240
gataatgtga aaattctgca atttttagatt aatttacttt caagttcaaa taatagaatt    300
atctgcatga ttacaaacta tgcacttcaa agagtagtta gcatcccttg acagtgcctt    360
aaaatgcttc tcccatattg aatcaatctt aacttgtcca taatactaga gaaaaaaaga    420
gatcttacac tgataactaa tattgaaaga taaccttccc ttcattcttat taccctaatt    480
gacctttcaa taaagctttt aacaaaaagc aaaattaact ggcttggggt gcagagccta    540
tttctcctgn cattatctgg caataatgaa ccaagatatt ggatagactt aat          593
```

<210> 289

<211> 404

<212> DNA

<213> homo sapiens

<400> 289

```
ggtacttaca ttttttagtt atcataaaaa ttgagccccc aaaacattac aaagaaccca    60
gtaaaacctt agatcatgaa aaagcagtca agagaaccca acaaatgaga gaattttatac    120
ctgagaaaag aagaacaatc tgggtgagagt ttaaaaataa gttaaaattc tcaatatatg    180
tacagaagaa gttagatttt acagagtgaag gaacagataa tgaaacaaga agagaaagct    240
gtgagaaaga agcgttttaga catcttgaag tgaaaaatat tataaatata atattgaagt    300
aaaagaacag ttagactgca catactttct atagcttaag agaaaattac aggttaggaa    360
```

atagaactga gaaaatcttt cagaatgcag tttagagaga gtta

404

<210> 290

<211> 442

<212> DNA

<213> homo sapiens

<400> 290

gtcatctttc atgtccatct ttctctttca tttcttcta actctctcta aactgcattc 60

tgaaagattt tctcagttct atttcctaatt tctgtaattt tctcttaagc tatagaaagt 120

atgtgcagtc taactgttct tttacttcaa tattgtattt ataataattt tcaacttcaag 180

atgtctaaac gcttctttct cacagctttc tcttcttggt tcattatctg ttcttcattc 240

tgtaaaatct aacttcttct gtacatatat tgagaatttt aacttatttt taaactctca 300

ccagattggt cttcttttct caggtataaa ttctctcatt tgttgggttc tcttgactgc 360

ttttcatga tcttaggttt tactgggttc ttgtaatgt tttgggggct caatttttat 420

gataactaaa aaatgtaagt ac 442

<210> 291

<211> 467

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (255) .. (255)

<223> n=unknown

<220>

<221> misc\_feature

<222> (417) .. (426)

<223> n=unknown

<400> 291  
gccagggtgg tgtccgtctg ctcacctgag gagctccctg ggtctgccag ctctctgect 60  
ggccaagccc ttcccctgca cttgtaagac gacgactgag cgtggctgat cctgcccggg 120  
ttctgggtgg atagtggaac ctgggggaac cagggtagaa tcccttatgg gaggcagcca 180  
ttggcctggc caggcttttg gcgctgttg agacagggt gaatttttag ccttgagtgt 240  
aggcacaggc gaganctgga gcccaggcac ttgttcctg tgtggctggc tgctcatctc 300  
tgatttagct ttggctcaat ttttgccta ccccctgatt gctactggag ccagcatggg 360  
ggtcacagcc actggtgtct tagggccctg gaagagaaga cagcaatccc aggttgncct 420  
ntcctntgct cagggtgat cctggcagac atggaagagg agatagg 467

<210> 292

<211> 405

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (87)..(393)

<223> n=unknown

<400> 292  
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ctcacaaggc ggctcccttc tagcgtnccg gattccagt aggtgtggca tgctagactg 120  
ccacatgaag ttttggtgt ggcccttccc cgcatacct ccaaaactgt aaaatgcttc 180  
cccgaccttg gagacgggga ccagagagat gtcctctgca gttcttccca gaggtgtggg 240  
ggccttcaca tgggctgacg cagctcaaac atgaactgaa cgatggcttg tntcttcng 300  
catttgncat gnngaccag ctccctccca agtcttntnc ntatctntcc tgcctatctn 360  
gtcncctatg tctgccagga tcagccctga gcngagggat gaggg 405

<210> 293

<211> 383

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (313)..(313)

<223> n=unknown

<400> 293

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tctcatgagc tgggtgaact gggggcaact tcgagccctt ccccttgacc accttaggga    120
gcaggggagc tagctgtcct cagcagcctc cgcagcccac ccaaagtctg tccctcgctc    180
agggacatgg cagccccag cacacatcct ctgctcccggt ctttcccgcc cctgggtgttt    240
tctagcctac cttgccctgt gtgtccctct ggaatcaaata catgggcaga tgtagctgct    300
gctggccgtg ggncccgttc tgttcctga ggtggcagcc tctaacctgg caagtgttct    360
tgtgtctctc cagtgcgagg acg                                             383
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<210> 294

<211> 596

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (538)..(564)

<223> n=unknown

<400> 294

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gttcatttcc aatcatttct ctccggttct tgttcctaag cggcccaagc caagatgatc      60
attccagttt attttcaact ttccgctgga tcttccatgc cctccccaat ttggccgacg    120
cagagggagg cgaccctgct gggttcacag cagcaaactg tcgtttaagt ccaacaaaact    180
agtcaatctt ggtcggtggt caccgaacaa acccatctcg ctctgggtcc ccaggtgcag    240
aatcgatgtg tgttcttcac caacgcacag accgcttctt cactccagtg ttcaattcct    300
```

ccagtcttca gccgagagga catctgcggt cataaggcca ctcggatgca gtggtgcttg	360
agtttgcaag gcaggactcc tttgttcagc tggtaaaagt caaccagctg gatcaggtca	420
gagaatttgg tgttcccgtc atctaggctg aagaacgtct gcccgtcgtc ctgcactgg	480
agagacacaa gaacacttgc caggttagag gctgcaacct cagggaacag aacgggggcc	540
acggcaagca gcagctacat ctgnccatga tttgattcca gagggacaca cagggc	596

<210> 295

<211> 386

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (366)..(366)

<223> n=unknown

<400> 295	
gctagcctaa ctattcccca acacctttag gaagataggt cttccctgac cctcagtctg	60
aggtctagaa gcccttctgc cttgcctcac aggcattctt cctcctcccc cgccccctag	120
accagtccaa cagcagcccg tgcagcctct gaagtccact cccagtgcta gctgatggga	180
accccatggg ctctgtctg ctatacaaat ggaacagact ttcttcagag ccaaccccag	240
ctgccccact gaagctgggt gccacagtga ttttcagtct cataccagat tctgatctct	300
tctcttgccc acctttgggt ctgcagagtg gatcatcttg ttttatactc aagtcatcat	360
taaaanttat agaaaaagag agaatt	386

<210> 296

<211> 351

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (15) .. (347)

<223> n=unknown

<400> 296

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gcttcaacat acganttttc agntcatgac atctacatat gtatgactgt atcagtcaat      60
gtctagtcag gaaaacagaa accactggag ataattcaaa cagagaggan tttcatgcac      120
agttagttat aaaagtgtag gaaagactgg tggaacaaaa tgcagaagtt acctagggat      180
cagaaagccg ctaccatggc tgggttggga gccacaagc ctgcantttc tgnttccact      240
gctcgagctg aaaccacatt tccgctgctg accagaaacc taggagccca cccccccact      300
gnttctantg aaactgcta ttatgctttc aactggaagg ggttganttt t              351
```

<210> 297

<211> 536

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (469) .. (531)

<223> n=unknown

<400> 297

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gatacaaaat caacatataa aatcaatgta ttttatgcc acaatataca gtcacaaaat      60
ataattatta gaaacttctc atttctaatt ataatggaaa ttacatata agaataaac      120
aaaaaacatg tacaaccttt atggaaaaaa ttatacttca ttaaaagata ttaatgatga      180
cctaagtaaa tggagagaga taacccatga taatggatag aagagtcaat accagaaaaa      240
agagtgaatt ttccctaact taatctaaaa attcaacccc ttccagttga aagcataata      300
ggcagtttca gtagaatcag tgggggtgtg ggctcctagg tttctggtca gcagcggaaa      360
tgtggtttca gctcgagcag tggaagcaga aagtgcaggc ttgtgggctc ccaaccagc      420
catggttagc gctttctgat ccctaggtaa cttctgcatt ttgttccanc agtctttcct      480
acacttttat aactaactgt gcatgaaatt cctctctggt ttgaattatc ntccag      536
```



<210> 298

<211> 186

<212> DNA

<213> homo sapiens

<400> 298

```
cttacagcaa atagatttgg gatggaaaat accagacctc tggttgtgtc agggtttata 60
ctaatagctt tcttgagaca gagctcagac tttcattttt gatcttccac cccagggccc 120
cctctctgtc tatgggatcc tttctcccct ctctctacca ttttcccgtc ccttccccca 180
taagtc 186
```

<210> 299

<211> 447

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (19)..(19)

<223> n=unknown

<220>

<221> misc\_feature

<222> (386)..(414)

<223> n=unknown

<400> 299

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ccacacagtg agaatttang gggagatctt aaactactta tgtagttgca aagttgaaaa 60
atttactgat cctaattgga aggcttattc acaaattcaa tacattttga aattatactt 120
caaacgcaat tacttcgaaa aaagattaac ctgctctcca acaatataag agcattatat 180
tctaataaaa aaattggcac caaaccagta tgctatTTTT caaaagaaca agtgatatta 240
atgaaaaata ttgcctaaaa cgcatatcct aacttatcac agaaatataa aagtttatat 300
```

tttgaaaata tatactgtat taaagtctgt aagcatttca accaaaattt gcagaaataa	360
ctaagcaaca cttatctaca acaaanatat acatgcaaga caaccccaaa tggnttcct	420
taaatatcta caaaggcaaa gtgtaga	447

<210> 300

<211> 382

<212> DNA

<213> homo sapiens

<400> 300

tttcacaact gtatactggt gactattcaa aacacaaggc taagaaatgg cttcaaattc	60
tccattaggg aaattttacgt aactttgttt taaggtttct aattgcacag tagttgtata	120
cctgagagaa gtgaatactt tacctgctta agctctgtga aagttggatt ccaatgaaaa	180
gatgaatata tttccctcac agactcacct ggactgattc ctgctcacc tattctttct	240
ttaaagaaga catgatcatt gtcttcaggc actattattt aatttatctt ctattaagaa	300
ttaactgttt tgttcctctt gattcacaga aagaaacaga ggtaaaggaa cgggtctgtt	360
ttgacatccc taatatattac ag	382

<210> 301

<211> 577

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (9) .. (9)

<223> n=unknown

<220>

<221> misc\_feature

<222> (344) .. (344)

<223> n=unknown

<220>

<221> misc\_feature

<222> (541)..(544)

<223> n=unknown

<400> 301

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aagcctgang ggttttgcag ggggatcctg ggagactggc caagcacagc tgtaggtacc      60
catctttacc acaatgggat cagacttgct cttacttatt ttatattttg gactcccatg      120
taagttttta tttgtgcaag ggggtccagg ctaagagttt gaagacaagt gaatttgtga      180
tttgcattha tttcctttca tccagagacc aaagaagctt tgacaacaat gccctagctt      240
tccttcactg gtctttgagt agtcctaagg agggataaca ctaccattgc ttttgagcaa      300
tgaatttctt ctgagaacta agtcccctgt caaaaatctg aganacacaa aaagaaactt      360
cagtaatcac ctttgctatg gttcaagaat tcctctgtaa atatagggat gtcaaaaaca      420
gaccgttcct ttacctctgt ttctttctgt gaatcaagag gaacaaaaca gttaattctt      480
aatagaagat aaattaaata atagtgcctg aagacaatga tcatgtcttc ttttaaagaa      540
nagnataggg gtgagcagga atcagtccag gtgagtc                                577
```

<210> 302

<211> 368

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (2)..(2)

<223> n=unknown

<220>

<221> misc\_feature

<222> (97)..(97)

<223> n=unknown

<220>

<221> misc\_feature

<222> (326)..(326)

<223> n=unknown

<400> 302

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tngagacacc atttcctctg ctctgaagg ggacctggac ccagaccctt tctctgcac 60
aaccagctag ggaaggaggt gctgtttact gggtggnagc tgtgaccag aactgccga 120
tgcccgatcc gaggtccct gttgaatctg aaagccagcc ctaggaggtg gctattatcc 180
aattttatgg gtgaacactc ccagctatcc aggtcatcc agggaccaa cgtcagagta 240
gagatttgag cccaggattc ctgacctga gatgtctctc ttctccttc atccatggtc 300
actcagacac acgaaccccg ggcgancact gactgagggt ttgcgttgta gcaaaaaagg 360
gatgggag 368
```

<210> 303

<211> 67

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (11)..(54)

<223> n=unknown

<400> 303

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gttaggataa naannttaca ntgattgant tntttcattt agttacatca ntanaatttt 60
tataaat 67
```

<210> 304

<211> 488

<212> DNA

<213> homo sapiens

<400> 304

```
cccttccac tgccgtgctt ctgtttccct tctatgaagt gaacacctgc gggcctgcct      60
ctccacggca gcagatccat atgtcagagc tctttgaaa ctaaagcgca gggcacctcc      120
agggaatagg tgttattgat agaagtgggg cgggggcagg agtgaggctt cgcccatttt      180
ggggccctct ctctttggga aaggaggtga tcccaggcgc aaggcgcaga tcgataacct      240
gcatattggg gtgcgcgtca gggaggacac cgcagcaggc gcctttcctc cctccccacg      300
tcctgagtca gctctgcgcc gctggagcga aggccggggc ccgctggccc actttggggg      360
aaaacggggt cctggcatct cgcgggcgcg gtcgttcgcc ccgcatctgg tcaggacttc      420
gcccccggt agatggcttg ggtgggcttg tacagccctg ggaagcgatg ccctgtctga      480
aagtctct
```

<210> 305

<211> 312

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (147)..(301)

<223> n=unknown

<400> 305

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cgcataacct ggaggcactg tcctgacagc caaccaagta tgcagaggac ttcagacagg      120
gcatcgctc ccagggtgt acaagcncac ccaagccatc taccgggggg cgaagtcttg      180
accagatgcg gggcgancga ccgcgcccgc ganatgccag gaaccggtt. tcccccaaa      240
gtgggccagc ggggcccggc cttegtcca gcggcgaga gctgactcag gacgtgggga      300
nggaggaaag gc
```

<210> 306

<211> 321

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (311)..(311)

<223> n=unknown

<400> 306

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agcatattca acatctggta tcaacaaggt aatgtttaac cttagactag ccaaactagt      60
gatgacctgc ttccatgctg catctgctgc tttttgtggt gatgggactc agaaatcatg     120
agaaaggtct tcagtgatcc atgactgcaa caaattcttt tcttaattgt gccgtatatt     180
atgcccctca atacaactta ctaatctctg cctcagtttc tccatctgtg aaagtgggtg     240
aatacttata tacctccctt gaatgttggtg aagattagta tatgttggtg aagcactttt     300
aaaataaaga ntgatataaa g                                             321
```

<210> 307

<211> 283

<212> DNA

<213> homo sapiens

<400> 307

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catatactaa tcttcacaac attcaaggga ggtagataag tattacacca ctttcacaga      60
tggagaaact gaggcagaga ttagtaagtt gtattgaggg gcataatata cggcacaatt     120
aggaaaagaa tttgttgtag tcatggatca ctgaagacct ttctcatgat ttctgagtcc     180
catcaacaca aaaagcagca gatgcagcat ggaagcaggt catcactagt ttggctagtc     240
taagggttaa cattaccttg ttgataccag atgttgaata tgc                                             283
```

<210> 308

<211> 468

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (303)..(461)

<223> n=unknown

<400> 308  
gggaatacga gctttggagt cagaaaaaga attggaagaa ttaaaaaaga gaaatcttga 60  
cttagaaaat gatataattgt atatgagggc ccaccaagct cttcctcgag attctgttgt 120  
agaagattta catttacaaa atagatacct ccaagaaaaa cttcatgctt tagaaaaaca 180  
gttttcaaag gatacatatt ctaagccttc aatttcagga atagagtcag atgatcattg 240  
tcagagagaa caggagcttc agaaggaaaa cttgaagttg tcatctgaaa atattgaact 300  
ganatttcag cttgaacaag caaataaaga tttgccaaga ttaaagaatc aagtcagaga 360  
tttgaaggaa atgtgtgaat ttcttaaaga aagaaaaagc agaagttcag cggaaanctt 420  
ggcctgttag agggctctgtt agaagtggaa agacaatccc ngaactgg 468

<210> 309

<211> 370

<212> DNA

<213> homo sapiens

<400> 309  
gatgaagcag gttatactat ttttcatcat gctgccctgc acaacagagt ttctattata 60  
tgtcaactgt gcaatgctaa cttcaaggtc aaccagaggc gctttgttac gttcagccaa 120  
ggtaccataa agtttttttaa cctaaaatgt tggtatttta tttaccctta ctcagcatta 180  
ggaatgcacg ttgatttttag agcagggttaa aatttggtat taactagagc aaagttgagg 240  
tttttgtttc atttatctaa gaaaggcttc ttttagtttt ctaagtatca cttatagcta 300  
gcttatatgg ttttatattt gctcattgtg tctccttcat ttgagtataa gctctataag 360  
agggcaaaga 370

<210> 310

<211> 456

<212> DNA

<213> homo sapiens

<400> 310

```
agatcctctt ctctgacgtt ccaaagacta gattctgtgc aggtcactcg cccttcagtg      60
tgctcatttt attgttttct tcaaacaggt tgatgcactt gataaggcca cagcttcttc      120
ttatcttaac cttgtttttt ggtaaactcg acagtgcaaa gcaaaaggat taattccttc      180
ttctatactg ttatgtttta ctaaggaaat atactaaatc tgttttgcta atattagaaa      240
aaacaaaaat tgaattggat tatttcatag caaaggatag gtgaacgtaa tcaagtcttc      300
ttgtgatgcc tgaatctagc cttcaagtta taagacgtaa gcgtgaattt ttcttagact      360
gataatcatc atgattttga taagatcatc acatcatgat cttaacaaaa cctgggaatt      420
agggagaaaa aggaaaatat acagtacaaa tcaact                                456
```

<210> 311

<211> 247

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (4)..(4)

<223> n=unknown

<400> 311

```
agtngcaata gtaaaagaac tctgatgcat cccttaccca gactcatcaa tggtttacat      60
tttgctccat ttgcttttgc atcatcatcc tccctccctc tccctcttcc tctctctcat      120
atgtatacac acttctgtgg gatccatttg agagtgtatt tttttacatt cttttaccta      180
accacagctc aaaacatcag tattcttgac tattctaagg cagatttatt gtcttgggtct      240
taaaatg                                247
```

<210> 312



<211> 344  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (75)..(75)  
 <223> n=unknown

<220>  
 <221> misc\_feature  
 <222> (213)..(339)  
 <223> n=unknown

<400> 312  
 ggcaactatag ccctagccac aggetgaagg gaccatgtgc ctgggcgctc ttggtaaadc 60  
 ggaacatgtt tgcngggcag ggaaccaaca gccgcgaccc gctgcagacc ccagtgtgga 120  
 acttcagtga gggtccttgg gggttgcaagc gacagaaaca caactcagac tagctgcaga 180  
 ttagaaagag aatataccttc ctctaggatc tcngtgctga naatgtacca ccantttnac 240  
 ancgccgatn gaaanggtgt gtttcctctg nanatccata tgccaacata tgggcatgga 300  
 ttactccagt ttaggacaca tgcccaaccc ttganccanc tctg 344

<210> 313  
 <211> 457  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (16)..(16)  
 <223> n=unknown

<220>

<221> misc\_feature

<222> (148)..(148)

<223> n=unknown

<220>

<221> misc\_feature

<222> (384)..(390)

<223> n=unknown

<400> 313

ccctctcatg tgccanaccc tgtactaaga gttgaaaatc cgctcatcag ggtggtggtt 60

ggacaatcta acgtccttgc tttggagatc cactcgggtga ggtccttgga ggggtcaagc 120

gcagacctct gcttctcttt cgtctagnca atcacagaac actccccacc agaggtggct 180

caaggggtgg gcatgtgtcc taaactggag taatccatgc ccatatgttg gcatatggat 240

gtacagagga aacacacctt ttccatcggc gctgtgaaac tgggtgtaca ttctcagcac 300

agagatccta gaggaaggat attctctttc tatctgcagc tagtctgagt tgtgtttctg 360

tcgcttgcaa cccaaggac cctnaactcn cgtccacact ggggtctgca gcgggtcgcg 420

ggctgttggt tccctgcaag gcaaacatgt tccgatt 457

<210> 314

<211> 245

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (82)..(241)

<223> n=unknown

<400> 314

gcttagttgt ttgggtcatg gattcccttt gtatctacct gcttctgcct aatagcaact	60
agctgttctt tccctcaact cnnnnnnnnn nnnnnnnntt gcagttttgt tttaggatat	120
ctgggggtact tcacccagtc ttgtgccacc ctgtcagctg nagctctttc tcnagcnng	180
gaatngctna aggttccan ntcaaantcn tgagaacaag ngaaacgnan gggntttcttc	240
ntttt	245

<210> 315

<211> 420

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (2)..(408)

<223> n=unknown

<400> 315	
anttttggca tattactagt attaattata ttnttaatgg nagtaacttc attnaactaa	60
gctcanaaat tagccatcaa atccattnat cttgtatttc ttatcttggt gaattcttga	120
tccaccttga ctctgacat tcntnactca cnaggcctng atatatntaa taaatcacca	180
tttctgctgg tgcncagttt attctaactc aaatnanctg ntgataggca ctncataaagg	240
ggcaaagcca gcctgacngt tgagacccta ccagcnatca ggaacagctg atcgnaaaag	300
ncatggntct ttgantcaag ggcaatnagt ccatgnatcc tcagnncaat gtaggcngtg	360
gntcatata ncnaggaana annccatac gtntctcttg ttctcannaa tttgaactgg	420

<210> 316

<211> 288

<212> DNA

<213> homo sapiens

<400> 316	
gagaaatggc agactcccta cattagcatt caggaacccc agtgacctgg cccatttggt	60
ccttctctct tcgttcattt cccatggcat ccttttctta gatgtcagtc tcgtctctca	120

tcctaaagtt gcccaattgc actggcttca gaactacaat tcacaggcaa ccctgtggag	180
gcattttttcc catctcttcc cctcctcct ccctgtcctc tccccctcct tgttgccctt	240
gtagccctcc tctcctctt ttaacacagt ccagataggt cttcatgt	288

<210> 317

<211> 252

<212> DNA

<213> homo sapiens

<400> 317

ggaggagggc tacaaaggca acaaggaggg gaagaggaca gggaggatga gggggaagag	60
atgggaaaaa tgctccaca ggggtgctg tgaattgtag ttctgaagcc agtgcaattg	120
ggcaacttta ggatgaggag cgagactgac atctaagaaa aggatgccat gggaaatgaa	180
cgaaggagga aggcacaatg gggccaggtc actgggggtc ctgaatgcta atgtaggagg	240
tctgccattt ct	252

<210> 318

<211> 234

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (225)..(228)

<223> n=unknown

<400> 318

ggagcatcta acgcctatga agcaaaagag gttgttaata gactctttga ggatcctgag	60
gaaaactaaa gtatatactg tgaaaacttt gagaagataa tacatatgtt cacgtcaata	120
tacaaccatt tggcacagct tcctgggagg aataataaga aaaacatgct ttggaggaaa	180
actcaagata caaaaatgaa tggctatgca taataacaat aaaantgtat tccc	234

<210> 319

<211> 517

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (228)..(228)

<223> n=unknown

<400> 319

ggcttaagtt gaaatgttta gtggaaaaca ttgggttcgtt aaaagtagca gtggatctac 60

agctcttttt tgagaatgaa ttgctattat gtttgctgtc tacactgagg tgtggcatga 120

agcctttctc tcgtctcctt tataccttgg tggatctgtg tttccggaca cttttccttt 180

tgaaagttga gatcccgttc agaggctgac agacttgctc ctagaagnta gggggcataa 240

atatgccaaa tgcaaaacca caatgatttc tttgattaca gggaccttgg ggccagcttg 300

cggtaagaac ttgccttttag aagatccttt ggttcccatc agtgtctccc tctcctcaaa 360

gggatggcag cccagtggac agtgggcaca tgaccctgac atcgacagac tcccacggga 420

ggtaaagctg ctctgtcagc gtcgccccag acagacgtgc acctttcctc atcagcccga 480

acctggcctc catccacacc ttgtgcaaca tgtggat 517

<210> 320

<211> 582

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (134)..(134)

<223> n=unknown

<220>

<221> misc\_feature

<222> (517)..(568)

<223> n=unknown

<400> 320

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gctctagggg ctccaggcat aaactcaact gccaaacaaa tacagttttc aacaggagat      60
ccaattttac caagagagtg ttttttaaaa aaaacaagtt aaagatgaac acaactccgc     120
acacttgtag cacnttcagt agactgttac ccaacactta tatgcactca aagatggctg     180
cagaaagtca gagactaaga atgtgcctgc cgctcagtca ccagccatgc caacagacca     240
gttttaattt cccaaataga agatgagggc agaaacctga ttaaaacaaa caaaaagtaa     300
taccaaactt ggtacattac taaaccaaga gctgaagcta gaattcattt ggtgaccttg     360
agtttatgac ctctggcag caagtgaag ttcattgttt atatggctgc ctcacattaa     420
agtggctgct gctcattcac acagtctcca aaagaaagg caagggcaag gactgcggac     480
agcttcacgt tccccttgga aagtcagcac gccagtngng agacgtggnn aggagaagca     540
catgtnagaa ccaggaatga cctttctnat tacagccaca ct                          582
```

<210> 321

<211> 475

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (207)..(207)

<223> n=unknown

<400> 321

```
ctataggcca cgctgtagcc ttagatactc taactcgtga aattttcatc gaccgctcgtc      60
catagggcaa ggcacgcttc tgccctctgt gggacagagt tgtcgatgat tatagggtgcg     120
gatacccgct tcagcctgtg ttaatcgggg atgcagcccc ccacccttcc tgccgtgggtt     180
ctaccagacc tgctgaggac gcctgancca ggtgcgtcac cccacactgg gctgaccagg     240
```

ccaggacttc gtcgtccgcg ggacgctggg gggcgctgc cgactggcac cggcggctag	300
ctccgcacga atgggaaatc cggggtccg tcgccaacct gttactgctg cagaacgcca	360
ggaagtcagc ctgatccac agatttaggg taaaatatcc cggggggccg aagtggaaac	420
cggagttgcg tcattgctcc caaccgatat cacttggcag cgaacgggct gacca	475

<210> 322

<211> 383

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (30)..(371)

<223> n=unknown

<400> 322

gccagtcaag caccacaaaa gtgacttctn agtgttcaac ctctttcaga ggctcatggg	60
acttgcagan aatgtcccaa ggtattggtg gttggnaatt tcctcttatg cttttcttcc	120
cacaagaatc accgctanct ttcccacat gcttngggca aggggancct tcttannact	180
ttcagtacag gtagnaatc catccatcag actggcaggn ccnctanncg ggcacttent	240
cngttttctca naataaatgg nccnttccn agttcaagnn aacnctatgc ctctcttctg	300
tcnnnnntgt aagtctnccc agaaagtngc natgntagnn ccagaatgna ctgntgcagt	360
ggcttagnaa ncttcactgt tgg	383

<210> 323

<211> 423

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (47)..(47)

<223> n=unknown

<220>

<221> misc\_feature

<222> (403)..(483)

<223> n=unknown

<400> 323

```
gtcttgcatt ggctcttct tttgtgcatt tttccctcca gcagggnctg aattattcaa 60
acgtagtctc atgtctggat tggaacaaat ggaagagctg aggacaggag tgacaggagt 120
tctgcaggaa ttggatttgc aactcaaaac caaaggctcc cactgctgc aagatatttc 180
tgcagaaaga tcaccaaagtg gagtacaatt ggagagaagc aatactgcag agaaactgta 240
tgactctaac cattctggaa aagtcttcaa tgaacaccca tttcttatga ctcacatgat 300
aactcacatt ggagagaaaa cttctgagga taatcagagt gggaaaagcc ttaagaaaga 360
actttcctca tagtttttta caagaaaagt catgctgaag ggnaaatgct aagtgtggtt 420
aac 423
```

<210> 324

<211> 465

<212> DNA

<213> homo sapiens

<400> 324

```
ctagtaagat ttggaaactg gttgaaggct ttttcatggt taacacactt aggcattttc 60
ccctcagcat gacttttctt gtaaaaacta tgaggaaagt tctttcttaa ggcttttcca 120
ctctgattat cctcagaagt tttctctcca atgtgagtta tcatgtgagt cataagaaat 180
gggtgttcat tgaagacttt tccagaatgg ttagagtcac acagtttctc tgcagtattg 240
cttctctcca attgtactcc atttggtgat ctttctgcag aaatatcttg cagcagtggg 300
gagccttttg ttttgagttg caaatccaat tcttcagaaa ctctgtcac tctgtctc 360
agctcttcca tttgttccaa tccagacatg agactacgtt tgaataattc agacctgct 420
ggagggaaaa atgcacaaaa gaagaggccc atgcaagacc tcgag 465
```



<210> 325  
 <211> 508  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (483)..(483)  
 <223> n=unknown

<400> 325  
 ggcatattgtg aggagggcgcg aatcaagtta gcgggggggaa gagtcttaga cctggccagt 60  
 cctcaggggtg agggccctga ggaagaactg agggacctcc caccatagag agaagaaacc 120  
 ccggcctgta ctgcgctgcc gtgagactgg tgctccagga accaggtggt gacgaactgg 180  
 gtgtgaggca cacagcctaa agtcagcaca gcagaggagg cccaggcagt gccaggagtc 240  
 aaagcctggt ggatctcatt atccatatcc ctgttgatac gtttacctgc tgctcctgaa 300  
 gaagtcgtca tgcctcccgt tccaggcggt ccattccgca acgttgacaa cgactccccg 360  
 acctcagttg agttagaaga ctgggtagat gcacagcatt cccacagatg aggaagagga 420  
 ggaagccttc ctccggcttc tttccacttt gtacttagta ttttccccct cttctttctt 480  
 canatcctct tctctgattc ttggtggt 508

<210> 326  
 <211> 117  
 <212> DNA  
 <213> homo sapiens

<400> 326  
 tggtcagtag ttccatttcc ttgtcctgct tattcttttg ttcttgaaaa ttatatatac 60  
 ctggctttgc ttagcttggt gaagaaagta gcagaaatta aatcttaata aaagaaa 117

<210> 327  
 <211> 281

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (15)..(273)

<223> n=unknown

<400> 327

```
atctgattca ttagnnatct aatcttgchna tataaantgg gtgcattaag catttgtagt      60
atattaagcc tgggagccng aagtttcttt ncagcgttct tattaagntt atnatgnnng      120
aaacttttca aaatcnttaa tggnnaatga tgtcccaatt cactcttttc tttttgantt      180
tagatgggna atgtaaagtc ataanatcga taggttgact gtnacaacta tgtttactta      240
canagtgaac aggaaatgag aatgggtgat nnnngtctct g                          281
```

<210> 328

<211> 242

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (77)..(237)

<223> n=unknown

<400> 328

```
tacatagatt tcacaatact atggaatact tatatttagc taaagtcaca aacacatttc      60
aacattcaaa atgatngnca tcnttancat tctaatctac aaagctcatg aataaagaaa      120
aatacaaaaa cctcaagttt tacaaaaaaa aaaactttta agggtacata cattnccaat      180
naaaccattt ctncagatn nnagggaaaa nnnnnnaggc ntaccactgn cttttntttt      240
cc                                                                242
```

<210> 329  
 <211> 381  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (18)..(37)  
 <223> n=unknown

<400> 329  
 tgcttctgga cggaagtngt ggctgtggaa ggcgtanac catcctgcag acagacaata 60  
 attctggaga tactgggtgga agttccaagt ccaataagac actcaaatat gagtacaaat 120  
 gccttaaaat ggaattgaaa aactctttat tttcccctat catttattgg atgggtgggt 180  
 ggggtatttt tttgtaattg cttttttaaa tattagttaa tggattaaat ttaattcttc 240  
 agcgtaaaat ggtgaagaac tagcatatag ccattgatca taaactgact atcataaaat 300  
 caaaacaagt gaaataacaa aatggacatg gtggctttgt ttaggtagag ccacaaaaga 360  
 aaagcttgta atattttata t 381

<210> 330  
 <211> 467  
 <212> DNA  
 <213> homo sapiens

<400> 330  
 cgctgctttc cccactctct gtcccatgc ctctggggc tcagggtgca gtcaagccct 60  
 gtctgtctcg aggcttctc ctccctcccg ttccgcagag ctgttctggc aggggcctgg 120  
 agtccagagc cgcagcttcg tccctttcgg ggggcctcag atcgctctgc tgetgccctt 180  
 ttcctctgga gatctgcgag aagggtgaac tgagataatg gatgagaaag catgttgaaa 240  
 accacagccg gggcttttct ctaagggtat cgagtagctg gttctcaggg atccaagaac 300  
 agtgatggac aaggcaaagtg tgagccagta tggatcatcag tagctctata ttgattatca 360  
 gccagatggc ctaaaagata cctgtctcaa tattactagt gtatttttca ataaaataaa 420

ccatcactat atgggtatct tcttggtagt cacagacatt ctatcga

467

<210> 331

<211> 547

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (375)..(544)

<223> n=unknown

<400> 331

gaatcagtag tcacatcgtc tcaaataaag cataaactgt agatttatcc aacagtaaag 60

tccatgatga aacaaagtga tacagtgatg agtgcccaa ttcttctgta agtgggtgat 120

ggtgtggcct acaataaatg ttttctgct tattattgca gggtaggagag agagttagaa 180

tgaaggcgaa gtttctacg cacataaagc tcagtgaagaa agcaattcca agagtaatgg 240

aaggaaaacg actctcgga attcagtttg aacactggcg actgagccca taaacatctt 300

tctggaatga ggtttgcaga agaaagcagc ggtctaacct gtggtagcct gtgactctga 360

cattaacacc agagnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnacac tagaccctct ggagcagaag 480

ctctgggggtt gaggcccgca atctgcgctc ccatgccctc cangcgattc cagcacaggc 540

tgangtt 547

<210> 332

<211> 404

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (87)..(87)

<223> n=unknown

<400> 332

```
atatatatac acatatgcaa tggagtaatg aaaatactat ataataaata taaaatggat      60
taaaactata taaaatagat gcatganatg gctacataga tatggatggt tgcatatagg      120
tacatttagc tggattaagt tagatttaaa tggccaata gagaactgtg catacaatta      180
cataggcaac cacaaatcaa ccctttctct gggctatcta aaataatcag gtactagacc      240
aaaaaatgac atgctgtctg ccttaacctt tagtgatgat ttgtaggaag aggaaggtag      300
gggctggtga gtggaaaaag tagtagagtt tgtgagggaa tgtctgtatg tctgaagaca      360
aagtctggga gattggtggg cccagaaggt gtgaatctac tctg                        404
```

<210> 333

<211> 407

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (20)..(400)

<223> n=unknown

<400> 333

```
gaatggtagt agaaaaccan atgggtcttag natatatatn gnaacaaaa aattacaact      60
tgaaaaaatt ccgtatatga cntggganta ngnaaggca tggattnttg anttaacant      120
ctaacagatg cttcantata aacacatacg gttgtttgaa aataaatatt cagcgtcaac      180
ttntcccat agagaaagca actccacaga cctgccgaaa tcacacttng aatctactca      240
agncttgga ttgcctctta gcaantngtn cctcaaccat ttctcttata aacgtgtgta      300
ggacagnntc agngaacnaa agtganctca tgtntcnct atntcngaag antnagnaag      360
naggggnact aaattntng cagcaanctc tatgaccann ggaatgga                        407
```

<210> 334

<211> 522

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (173)..(329)

<223> n=unknown

<400> 334

```
gttggtggga aatccttttag atcattagtt atgcagcaaa attgcttggc ttttaataatc 60
atatgtactg gcttattctt tctgaaggta agctacttcg gaagcacaac tattgactaa 120
aaactaaacc ttcgaaagaa atgacagcat tgctagtttt ttgtgtgcgt ggnnnnnnnn 180
nnnnnnnnnn ncgtggggta ctgtattaag gttagtttcc aacaagaatt gatgtaatta 240
gaagaaattg acttccttac ctattgcctc tgatatttac ttgcttaaat ttttttttat 300
tggaaatcca gaanaagtgg atttagagna caacactaac tcccacctaa tctatgacag 360
agatgtagaa gagagtacct gtgaaaaatg tgaaagtatc tgaaaaatgt aacctttggc 420
agcctgagca tagtcaacca gaaaaactat ctgaattaaa ataattggtc cataggtact 480
attttatttg gtccataagg attatttttc aacttttttt tc 522
```

<210> 335

<211> 566

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (22)..(555)

<223> n=unknown

<400> 335

```
acttcttcct ctcttatctc anattnnaga tagttatcaa gtaagatctt taaaattttt 60
tgnntnagct tctcctttat gcccaactgtc actaccatct tagttcatga tgttatcttc 120
```

agcctagatt atggcnatag cttactaatg attatccctc catcctaattg ataaagtgg	180
cttttaaaann tgttactccc ctgcttgaaa tctatgatag tttttaagat aattccaact	240
cctaagtaca tacggtgctt tatgatctgg gtgcccattc agtttcatct tctgtctctt	300
ctataganca tggtctctac tgcacataaa atattatatg gataacatat ctttttctct	360
tcctacttg gaatattctt ccttataata tagcccttcc tttgtcttat ctgctcccta	420
cccttctttt atacctcttt aagcacatag tnaccattat ccanccatat atctaacatt	480
nacttatatt tctctttnat tagactacaa agctcctcaa cgagtaaggt taaagggtgga	540
aaaagcttca ggtancagta acctac	566

<210> 336

<211> 479

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (398)..(411)

<223> n=unknown

<400> 336	
taatatttaa aatctagaga acatgaaaaa aggaagaaa acaaacctat tttaaagctt	60
acgtgactac tttttaatga gttcaggaaa aagatgatga aagttattgg gtattcccat	120
ggaaaagaga atagagatgg taaaacttcc tttctaggaa gttaccttct aggaagccac	180
agagttgcca tccttcttac tgtccagagg gaaaattcta gagttttctg aatttgact	240
cttttgactt tgaagcagaa caaattaagt ttcaactgac ccaagtccta aggatactac	300
caacctgctt attttaaata gttgcaaacc atgaatttaa acacttccat aaagccta	360
tcactctcac caattcacia aaaaatgcca agaaagcatt taccacatgc natcactggt	420
ccaaagattt agagaggttt agaagagtga ttgtaaccac aggcttggcg ccatattgc	479

<210> 337

<211> 500

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (6)..(20)

<223> n=unknown

<220>

<221> misc\_feature

<222> (409)..(485)

<223> n=unknown

<400> 337  
tccttnanan nacttttctn gggaataaac aagactgata caataatggc ccaaactaat 60  
acgtacaggg cttctatgcc ccatgaaatt gactggcatt aggccgtgaa atccgaggtg 120  
atgataaaca cttgaaaggt ggaaagttct taagtgtatg actaaatgac tcaactggccc 180  
gtgaaacatg caactatttt agcaaagggc tagtttctct tcacatatac ttaaaagcag 240  
ttgcagtgag acttcagtgagg aggggtattat agtgcaaact aagaaagatc agtcatgtt 300  
taaaagaaaa ctgagtaaag gaaatctgca tttatggaaa ctgaaagctc taacactgac 360  
tcattgaaga agtctcccgga agatttataa gtgtaatcaa caaggctant ctttgtgaca 420  
agcatttgtc atccccgata taagaaaaaa caattattgg aaaacaaan tgccacaggg 480  
attgncccat tcccagtatt 500

<210> 338

<211> 490

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (15)..(53)

<223> n=unknown



<220>

<221> misc\_feature

<222> (236)..(236)

<223> n=unknown

<220>

<221> misc\_feature

<222> (341)..(341)

<223> n=unknown

<400> 338

```
aaagaattag tttanatttt aatttttcta ttttgctgag tgaaaangta tgncttttag      60
tggcatgtgt taacttgacc actcttgagg accagaagct tgtcacttgt gtatttttct      120
tagaatgtag catttgatac ttttaattgg aaatttggtg gtgcttatat cttgttttac      180
atatgtatgg gttgctgacc agtccagatt ttttgtccat ttttcaggaa aggganaaga      240
taaaacagac ttggataact tttgtttga aattgtagaa gtataatgaa aaattacctg      300
tgaaggaaga aagtgatccc ctcatTTTct gatctcatat ntttcttatt ttccgtgtct      360
ttctcccttc tagtgtctga gagatttctt caatttcaa ctcttttact tctgtacct      420
atcattttta attttgattt aaacctttcc ctggagggtt tctatagtat ctggtctact      480
tcatggatag                                         490
```

<210> 339

<211> 424

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (16)..(64)

<223> n=unknown

<220>

<221> misc\_feature

<222> (333)..(402)

<223> n=unknown

<400> 339

```
aaagcatgaa gaaganacaa tcatttataaa acaccanaga cccttacata gcaaaggtta      60
aganataaat taagactcct attgggttgt gtctgccagg gaggatacag gcctcattcg      120
ctccggtcct tgggttcccg gtatttccac tggatgtaat caaagatgtc tttttcacta      180
tccactggca ggggttctcc tgcaactcca gtgactccca agggacggat ggtgtactca      240
ttgattgtga aacccttttc tagggcatga gccctcatat tcttattgaa aatatcactc      300
ccagtgaat agagaacacc acagtactac tgntctttgg gtatcaacct aaaaaaatg      360
gacagtagat acnttttttt accatgcatt tcaagtttag cnaatatagg actcctaaaa      420
tcaa                                          424
```

<210> 340

<211> 222

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (46)..(207)

<223> n=unknown

<400> 340

```
gtgtggggag tgtggggaag gcccaggctc tgtgtgcaga ggaggnaggn ccaggctctg      60
tgtggcgagg aggaaggctc aggctctgctg tggggagtgt ggggaaggcc caggctctgn      120
gtggggagtg tggggagncc cangctctnt gtggaganga gggaggcnca ngctctgtgt      180
ggggagtgtg nggangnnca ngttttnttt gtggaggagg aa                          222
```

<210> 341

<211> 570

<212> DNA

<213> homo sapiens

<400> 341

```
atggttaggat aggagagggg gcagcaagga gctgtcatga ctgaccccggtgtgccttat 60
ttcttccag ggctgcactt ggggcgtggc ataccaagtg caaggggagc aggtaagcaa 120
ggccctgaag tacctgaatg tgcgagaggc agtgcttggt ggctacgata ccaaggaggt 180
caccttctat cccaagatg ctctgacca accactgaag gcattggcct atgtggccac 240
cccacagaac cctggttacc tgggccctgc gcctgaagag gccattgcca cgcagatcct 300
ggcctgccgg ggcttctcgc gccacaacct tgaatacttg ctgcgtctgg cagacttcat 360
gcagtctgtg ggcctcaggc gcaggacgag cacctggcag ccatcgtgga cgtgtgggca 420
ccatgttgcc ctgcttctgc cccaccgagc aggctctggc gtggtgtgag gggttgagcc 480
cctgcgggga gtgctcatgt ggacatcagg gcaagacacc cactccagtg cacaagacag 540
attgcgaccg ttgagccac tgagcagata 570
```

<210> 342

<211> 533

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (21)..(521)

<223> n=unknown

<400> 342

```
agactgggaa ggttgccagg ncctgtagtg atgagcttcc caggaataga ccaacacaca 60
ggcaggagtg gccagacag nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nagaaaacaa 120
ccaagtgggt aagaggccca ggccaggctc agcagctgtg tccaggcatc agctccagct 180
ctgctctggg gaactggtgg aggagaaggg ctggccgggg cctcagtcct tacagggtc 240
```

cttctcctca tgcctacta tccctcatcc agcctgctgg gatccttggc aggtggaatt	300
cccagggctc tggatggctg ggctgagtga gcagaggatc gaggtctctg gagactccct	360
ggggaggtgg aggcctgggt ggtgtggggg tagcagcagc actgggggga atctggtcaa	420
gttccaggat ggggccactg ctcagcaggg cccctgtgtc cagggcaggc cctccacctg	480
cccaccacaa caacatggtg caataaataa agtttcaagt ngtaagtcag tgt	533

<210> 343

<211> 483

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (463)..(470)

<223> n=unknown

<400> 343

gatttttctc ttttagattg tgtttacctt tttggagtga tttcaagtgg ggaagacaaa	60
atttcaaatt agattttcta tcaagaataa tttttcaaat tgtttcattt taggaagtag	120
tcatgccccca caagatgtca gtttgtcata tccccaacat catggttgaa attcaagccc	180
tacctccaca tctcctagca ggtaatatct ctcacttatt gttaagatca tttatcagga	240
attcttatag ggaatagcct caaaacacat gagtaaataag tctccttcat tattctctta	300
tctcttcatt ctgccgttat tacttgctt ttggggttgt tgttatgtat ctattctaag	360
gggtatagaa tgtgtctatt ctatagacaa acacattgta tatagtcccc ttagaataga	420
tacgtatata actatttggt gatttgtagc gacataacca tanccacatn tgtgtacagt	480
aac	483

<210> 344

<211> 361

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (305)..(305)

<223> n=unknown

<400> 344

ccaagaaat tctaagaggg aaaacttttt attttcctct acctaggatg cctttgaaga 60

ctccattaaa ggggctggaa gtgcttttaa tgccaacttt accaagaaat gtttaaacac 120

tgttaattaa tttcagctgg caagaaagaa caccgggagg gtaçactttt tgcactattg 180

ctggctcact attccacttt ctagtatctc ttcatacca tccacttctc tccagctcat 240

ggcaccacct taatctaaac tatcaacctc atccatcaat agcttccaac atcaatgcct 300

tgctnccaaa agcttctctca ctgctctatt ttcaatcttg cccctccaat ccattctccc 360

a 361

<210> 345

<211> 603

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (46)..(46)

<223> n=unknown

<220>

<221> misc\_feature

<222> (602)..(602)

<223> n=unknown

<400> 345

ctacttctta ggcacacaaa tagtgggtgt ctcccttgga cctganacaa aactatcagt 60

gctaccaagc cttgtaaaat agggaggaaa ctaatatctc ttgagtggct tctgagtgcc 120

tggtgctttc gcggctctct ggagagattc ctgcccctga tggctttggt gtgtactcct	180
ctcccaggac ttcagcactg agattttccc aacccccctgg ctttttctca ccttggggtg	240
agttgatccg gcactaccac aaaccccacc atctgcaaac caaccaagat taggcagtat	300
gccctttccg tcttgactg ctcttccaaa acttccatct gtatttctca caccctcagt	360
aagcaaagtg agtgtgcatg gacagagctg catccactgc tttctcccag cgggtgcagt	420
ctaattctgac acggggaaca ctaggagttt agcggaatct tcagccaccc tattaatgtg	480
ttacgcatta ggcattgtag tggaaactcc tctgatggct catgactata tgaacaggag	540
caatttgga tataacatgt cagctgtgga ctgggaagtg ccgtgagaga aaacactacc	600
tng	603

<210> 346

<211> 483

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (86)..(477)

<223> n=unknown

<400> 346

agaagggagg gcagttgccc atggaagggt aagtgaggca caatactatt gggttgcggg	60
ccaagtacac agggttgcac tgtganggaa ctgaggnggt tctgggaggg cctggtgaca	120
acaatggatt tggggagatc cacaaaggaa attttcattt cctccccagg ttagctattc	180
agtgggtgga ntatncagtc ttnttagcaa ngtcactgct ccttagcnac atcaacaana	240
gtgccaaagc tgangacaca gagnatncca tcattgtctt tngnttctct nnangcctct	300
ggacntggt ctcactgtga anngagccan gaaccaatna cgtcggaagn naagcctttt	360
catgtcngat tcnntgacct gcaaactgca nnnatcccan cnngctccag aaaaacacgg	420
cagttngaaa caagggaatg tgggtgttag gtgnaaaact gcngagctac gggctcntga	480
tga	483

<210> 347

<211> 530

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (33)..(46)

<223> n=unknown

<220>

<221> misc\_feature

<222> (498)..(528)

<223> n=unknown

<400> 347

ttttaaacaaggagaaatgc cactttgaaa gantactggt ctgacnttct ctttttaaaa	60
attccttctc ataattccta cctagaataa tgtgagtact taatagagat ttagtaagtt	120
tttggtgact ttatattctg acgcgcttta gtttacacca taaagcactg aacagttatt	180
tccaaagaag tgtaatattg tagcatgctg tcagtatttt taaggatttt ctaatttgcc	240
aggtacctga gagcagaaac catgattatt acacttattt tctcccagct gtatctctta	300
gccagtgtct ggcataaac tgacactcac taaatgtttc atagaaatac aagagtaggc	360
ttttggttgt tttagtttgc agatacatTT ctgtttatga aaatgctcaa gttttcttga	420
gatacagatt ttttgataaa aggagtgtct aggttgata gaatctttca tttcactata	480
ttataaccag gtgattanag tgacaatttg anaccaaatt taaacacnat	530

<210> 348

<211> 513

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (29)..(31)

<223> n=unknown

<220>

<221> misc\_feature

<222> (307)..(307)

<223> n=unknown

<220>

<221> misc\_feature

<222> (427)..(462)

<223> n=unknown

<400> 348

aacaatatat taatagagaa atagcacant ncttattcag cgcctaaatt tttacgagcg 60

aaaatatgaa attttatttt tatgcatagt ttatgtattg atccatgggg cttacaaata 120

gcaacacact cttgggctga tactatcgtg gattttgctt aaattatgag ggcaggaaaa 180

ttttaaaatc ccacaggtca caactgaatc acattaactg gctgatttag taaatgaagg 240

gcaattctaa aatgcaaaat aaaaatggaa ttaaggcagc tttaaaagaa aataaaaactc 300

atccacncca aaatagtgtc acataattca ttacttaaaa agctctctgt ggagtataga 360

cataaagcca aaaataaaaa caaacattgc agttgtgatg cagcatcagg tgcttttact 420

tcagtgnatg aaaaataatg gtcacaactc aaatgaatgg gntttaatat gcatatatgc 480

accttaccag agatgtttgc taccaatgat atc 513

<210> 349

<211> 393

<212> DNA

<213> homo sapiens

<220>



<221> misc\_feature

<222> (61)..(61)

<223> n=unknown

<220>

<221> misc\_feature

<222> (287)..(384)

<223> n=unknown

<400> 349

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gtgggtgtaaa tgccaaaatg aaaacaatcc taaattatct gttccataaa tatacctatt    60
naaattttaat tttatacaaa acacagactg ttaacataaa aattaagact gaagttatct    120
ttaaagtaat cagaatactt tttggtagtc tgcaacatac atataaattt actgtataat    180
ttctggtttt ttaatttgat ttttctgatt tttaaaaaat tagaaaaatg tgtttataat    240
ttgttatgag attttgaaat ttaaaatata tttagctgta attttannca ttgatatgtg    300
cntatttggt gtcacattca tgtatccatc cttttgcctt gnnngttttca cttttatagc    360
ngtgcntcag tagtataaaa gggnataaaa tgt                                     393
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<210> 350

<211> 370

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (158)..(247)

<223> n=unknown

<400> 350

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ggaagtcaac atttaataag ccatcatcca caattgatta aaaatgttta atccttaaatt    60
tgtgcatcaa tatectatga ctccaaattt tatttatcac tctccttcaa gtctgaagaa    120
aatgattaat ttgctaagtt ccacagacag tacagtcnca ctgncnnaac atttagtatg    180
```

atgtcctact ctcataattag aattaaggac agccagtatc aaactggcct gaaacctgat	240
tgtgttntcg gttcagaata cctgtagtaa atctgtaaat ccacaccaag acacaacatt	300
aaactagggt gtgtatatct tataaaaacc ttttcacagt aaaaatcaac attaaatttt	360
ccaaattcaa	370

<210> 351

<211> 363

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (256) .. (256)

<223> n=unknown

<400> 351	
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tagtgatggg ggtaggacc agggacgtat cgatggaggt gttgtgaagt tgcatattt	120
taaatataca tttcagagcc aggtgcactc gctgatacat tggatgtggc atattagaga	180
aagaagactc gaaggtggca cctagtcttg tgttctgagc ttccagaatg aggcattctag	240
aagccaggac ccggnggaag cacggaagga gcagtggttt attcagtctg cagaagcagt	300
gcctacagga ctgctgtgtg aaagaggaca catgtgatat gagcaggtga aaatcacaca	360
gca	363

<210> 352

<211> 352

<212> DNA

<213> homo sapiens

<400> 352	
tgattatcat attcaatttt aacagatggt ttccattaga tccctcaacc ctccaccccc	60
agtccagggt attagcaagt cttatgagca actgggataa ttttggataa catgataata	120
ctgagttcct tcaaatacat aattcttaaa ttgtttcaaa atggcattaa ctctctgtta	180

ctgttgtaat ctaattccaa agccccctcc aggtcatatt cataattgca tgaacctttt 240  
ctctctgttt gtccctgtct cttggcttgc cctgatgtat actccagact cctgtacaat 300  
cttatcctgc tggcaagaga ttggcctctt ttcttgtctt caattggggtt tc 352

<210> 353

<211> 473

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (414)..(414)

<223> n=unknown

<400> 353  
gttgctgtta tatatcatgg agatgggtgag gtcaagaatg acagaggctg accattcagc 60  
agggtccacc atgtgaaggc cggggtttgt caccacattg aaagccacat ctcttgactt 120  
ggttggtgaa cttaggggta acctgataga gtactgacca actcaacctt tcccccttta 180  
aaccacagat agaaacaatt actctaactt ttgggtccct tatacatact tatgtcagag 240  
cacatgtaac actttttttc actttattta catgtttgtc tcttattaaa tcagctccct 300  
atgggtagga accttgtctt aattatcctt gaatcctcag catttttcac agggcatgga 360  
acacagtaga catttaataa acatttactg actaaatctg agaggaagag gatnctctct 420  
caatatcaga aaaactactt gccacacgac agttcggatc ttagtccact tag 473

<210> 354

<211> 423

<212> DNA

<213> homo sapiens

<400> 354  
ctgaatataa acatgaaggc ttagcattca ttatatacaa aaaaattctt caatctacat 60  
agcatcataa aagccaaata tgaaatactt atgttgctt tcaccaaca aattcagttg 120

atgatatatc tttctgaaaa taatacatcc cccaaaactg cagtacaatt ttaaagaaaa	180
ataaaataca tgtttatatt agtttcagtt ttcttgtttg tatttttctg tgttctaaat	240
tttttgcaat gaaaatgtgt tactttataa tcagaaaaaa atactatttt taaagaatgt	300
agtggatgag atcatttgca aatgtttacc tgaggaaatt ttgaggacat caagatcaat	360
caaggtgatt gggagttaat accagacaga aatatactgt ccttggaat atgacacttc	420
ttt	423

<210> 355

<211> 549

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (31)..(48)

<223> n=unknown

<220>

<221> misc\_feature

<222> (458)..(540)

<223> n=unknown

<400> 355

gtttgttatt gttggagaag aaaaggctga nacccaatta taccctgnac tctttattcg	60
accaagacct caaaagatgt caaagaagcc atttctccaa agacagcaac atctattgtg	120
aggcactttc atattcagca gtctgtaagt ttgtaggaga aaacataagt ggttaattta	180
aaataatttt gggctctaaa atggactttg ttgccttttt tgggtgggggt ggtgggaatc	240
ggattcagcc catttccaag ggatagtttc ttcattctcag acaactattt tgtgatcctt	300
tttaaaagac attctgaaaa cttaactcc tgcccttctt ccgtattaca gttgtgttat	360
tccagaaata ttgtctactt ttttaataata ttagattttc attcagatct taaacatgca	420
aacatgtgat aggttagctt ttaaggagg ttatcagnac cactgtatct aaatgttagg	480
taaatgggta gattcncttg aagtggatt tcctggcag acagcactgt atcatgctcn	540

tcaccaagc

549

<210> 356

<211> 551

<212> DNA

<213> homo sapiens

<400> 356

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acatgagcac tccattttct cccttctttg acaccaaca ccttattatt ctcttcattt 120  
ttcattttat cagaaccgta ttttggggag aaaataatcc actttaaaag aggaaagtgc 180  
ttacaacaca aaggcttata aaaataaata ttaaaataaa gaaatagatg tctattagtt 240  
ggaaatcatt tattgcctct ataaaagttt aaataaaaac tctacaaaaa ttcacattac 300  
agtctgatgt ggttttaagg tgacagtata tttcagaggt agtactagta aaatgggatg 360  
caggattgct aaaatgaatt acttaacaag ttaatgcaa ataaaatttc agtgtggagc 420  
aatatacact cagtatatat tttaatgaaa caattttaat tatatttgct tgaaaatata 480  
actttactct tttttcccc tagcaaact gttccttaat caaagtttgt ttttcagcaa 540  
tggtgtgttg a 551

<210> 357

<211> 560

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (46)..(46)

<223> n=unknown

<220>

<221> misc\_feature

<222> (502)..(502)

<223> n=unknown

<400> 357

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agcaccagtt gatgctcaat atacatttgc agactacaga agttangttc atttagcgca      60
ttggcagagt gtggacgctc cacctgacac taccgccttc cctgcccctt tgcaacagtg      120
tctcttggct tctctttcac catgctctcc tggtttcctt ctcatttctg tgattgttgc      180
ctctgaactt ccttcactgg ctcttccccc tcttccctat tctgtccctt tcaaagtgtg      240
gtgttcttgg ggttcactga cccccgtttt ttctgtttgc caactctcag ttctgtctct      300
agccgagcct tcttttctga gcttgactct cttgctcagc tgctttttgg agatcacatc      360
taaaatcagg ctcaccatct cccccagaat ttggcccaca ccgttttgag agttgacccc      420
ttgcaggcat cgggctaaac attgtctcag ttaatccttc acaactttat ggttgtagag      480
gaggaaactg aggcttggag angtagagca ggattgagcc ttctcacaca aatcaattct      540
gtggtctcca tcatctctca                                     560
```

<210> 358

<211> 305

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (3)..(159)

<223> n=unknown

<220>

<221> misc\_feature

<222> (301)..(301)

<223> n=unknown

<400> 358

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canggagtgc taaaggngtg ttccagggca ggatgaannt cacttggtact atgtcagata      60
```

tggtgcaaga nacagagaga cattgatgga tttggagata gagtcaacnt gagnttggtga	120
ccagctcagg atggaggggt ggggaagagtc agangtgcnc ctgcatttcc agcatgtgtg	180
agaacgactg gggggcagtc acaggaagac aggaaggata gccacactca ttcacgctt	240
agtctacaaa tagtcattag tatggaatgg actgtggaca caggccctaa ggatataggt	300
ntgcc	305

<210> 359

<211> 358

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (39)..(351)

<223> n=unknown

<400> 359

atagattaca aatataatac agatgcaatg acgactgcng tggccctcaa caatgtgcag	60
ttcctgggtcc ccacgacgg angagtcacc aagctccagg cagtgtccc accagcagtc	120
tggaatgctg aacaacagag aatattgtgg aagattcctg atatctctca gaagtcagaa	180
aatggagggg tgggttcttt antggcnaga tttcagttat ctgnaggccc aagcaaacct	240
tctccattgg ttgtgcagtt cacaagtgna aggaagcacc ctttctgggt gtgacnttga	300
acttgttgga gcnggggatc gattttcatc catcaagaaa aggtttgctg naggaaaa	358

<210> 360

<211> 318

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (310)..(310)

<223> n=unknown

<400> 360

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ttacttaaaa acacattggt atattcatat gctggataat tctcagtttg ctgctgctta      60
ctctccattg attttgggtg cataaattcc atgtttcatg gaatttagaa ttttgcattt      120
tctattttgg tttcaaaatc aaattggata cctttacata aaatgagtat atttagttcg      180
ttcaaagaaa cttcaacacc agactgctgt agggggccaa ctgagagttt gttgaatagt      240
aagaattttc ccatggtaaa acaaatcatt ttggacatct cttggtagca agcactgata      300
gaggagtacn aagattaa                                     318
```

<210> 361

<211> 463

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (426)..(426)

<223> n=unknown

<400> 361

```
gggagagaaa ccctatgcat gcactgagtg tggcaaagcc ttccgagaaa agtcaacatt      60
cactgtacat caaagaactc atactggaga gaaaccctat aaatgtacag aatgtgggaa      120
agcctttacc caaaaatcaa accttattgt acatcagcga acccatgcag gaaagaaagc      180
ccatggaaga ggccacactc ggaagtcaaa gttcatggca cattagagag ctaatcagca      240
gtatctatta tggacactga aagaaagttg tgtcaatttt actcacattt taaaagtata      300
ttttgacttg tggtttaa atggggagtaa attcagcctt tcttcttttc atctcagtca      360
taacccaaaa gctacgggag aaaaagcaga agtgtaatct ctgtatctga caaaattagg      420
agccanctgc aacccta atg agagggtgca caggcagagg aat                                     463
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<210> 362

<211> 502



<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (21)..(49)

<223> n=unknown

<220>

<221> misc\_feature

<222> (487)..(487)

<223> n=unknown

<400> 362

cttctcccaa gtcagtaa	at nngggcagct gtagggctct	tcacaaggna aagtcacctc	60
tcttccccca gcatgccata	actgttgctc ccatcagtag	actactttct aaaaatatgg	120
cttgtctgag tgactccttc	tgcaggcccc agcctgtttc	tcctcagacc ccaaattggc	180
taggaaacat cctacctcct	acctgcccac gcactgttac	cactgttata tctatggttc	240
cgcgcctcgg ggtatatccc	gaacctcagc taagagtcct	taccagtgtc gtcttgcacc	300
tgcagccttg agcactctca	ctctgaaatc tcctgcacca	gtgcttcatt tcctctgcct	360
gtggagccct ctcattaggg	ttgcagctgt ctctaattt	tgtcagatac agagattaca	420
cttctgcttt ttctcccgta	gctttttggg tatgactgag	atgaaaagaa gaaggctgaa	480
tttactncca tatttaaacc	ac		502

<210> 363

<211> 398

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (8) .. (371)

<223> n=unknown

<400> 363

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gggaaccnta ttggcaatgt ttantnctnt ngtaatnnat gtcngtttga aatctgtctg      60
tncancttgg gttacttgaa gatgctttga atctggnatg gctcttactg .catatcatgg    120
ggcagctttg agtacctggt agtctcanng ttttggnaag ttcngagact gctgtnggta    180
tactgaggaa gatctgtatt cactgattac acaagccagg agcgacaacg aggattaacg    240
tggttaccta gtatgcatgc ctttctggtg tattganttt nnagaatatt tctnnaattn    300
nataaanacct atgagcntat tcttgggata aattgattta tactgnagac tccttgcaat    360
gaaacagtag nattctgagc atcaccctga gcacagat                               398
```

<210> 364

<211> 448

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (19) .. (19)

<223> n=unknown

<400> 364

```
caataaccta agctcagtng catgaatcca cactgcacat tttattagca gtgtaataat      60
tttctaaaag attagtatca cagatgcact gatataagaa tgctttgaat tctttgagtt    120
ctccagaggc atattttaag cgtcagatac aaactttact tttccaaata atgaaaacca    180
aggcagtttt cctgaaagta agagcatctt taattaattc taggtaagcg attctgaagg    240
ttagccagaa gaggcaggta taccttaggg gtagtggata atctccaagg tttggtgagt    300
actagcgtgt gtgagtctgt gtgtttgcat actgtttctg aaaatatttg ggaaaccttg    360
gggagaatcc cctccattg agagttgcat cactgggagc tttcttacc aggagagagg    420
atatggaggc agaatttagg gtgagact                                         448
```

<210> 365  
 <211> 389  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (79)..(386)  
 <223> n=unknown

<400> 365  
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 actggcagct ggaagtgana cttacacatt atgcttcatt gtatctgaga gtcattgaagt 120  
 ttacaaagac atttctgggc ttattctgat aaatatcaca tgctagtatt tcctacattc 180  
 ccatttactc agtggtccct acttcctaaa ggagggaata gngccgtcga acagttgtca 240  
 aattnncttc acaaacagct tggttttcct taatggatga natcaccctt cgttgatgga 300  
 tccatttgca caggnatttc tagatcatct canggntcnn actctggggtc ccacctcctg 360  
 ntngctaaa aatggntagg tatctntat 389

<210> 366  
 <211> 399  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (160)..(394)  
 <223> n=unknown

<400> 366  
 aaagtatat ctcaaatac cccctttaag gtacgtttca gggctcttgt cctaaatgga 60  
 ttttctatta aatatcaggc ttttttttct taatgaagta tatataatta tgaatcgttg 120

tccaaaggat gtatttggtc atctgccctg aatgatagan caatgaatga attaaaagga	180
actacattta gaaaagcagg ataagtatga ttttagaaaa cttgaaggan gaaaacaaga	240
aagaagggca cttgtagaga tgtgnagggg cagaaaacag aggtgaaagg gtttcctgna	300
cccangtctg tagtaganan cactactgag ttanagttct ctaagcccat ctgggatcct	360
ttggtgacag antnttgctc tagtggnntta tganatcac	399

<210> 367

<211> 428

<212> DNA

<213> homo sapiens

<400> 367

taatttgtaa ttctagcaca gtcagggtacc acagttacaa gagttctatg ttccactgaa	60
taaatgccac tgaaaaacca ttgaactcaa ccacttcctt ccaattttct agccactgga	120
gtagaaaaat actggaatac agtagaacag aggggtcaag acaagttctg gtttgtcaat	180
aactaacttt gaggtttcag gcacattgct ccaactctc tgagtctcaa agccctattg	240
gtaagggtggg ggtggcaata tctatcactc agcactattg tgaaaattta aacaacataa	300
ttagtataca ttaccagca cagtacctga tccattatgg tactcaatac accttaattt	360
cttcccttta gttcccttc ttccattaag agacccaaag gcacaagtta agtggaatca	420
tttctgag	428

<210> 368

<211> 394

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (362) .. (362)

<223> n=unknown

<400> 368

gtgctatcct agaatcaagg atttcagcaa caatgcctct gttcaaactc ccagaaattg	60
---	----

atgatgcaat gcgcaacttt gctgaaaaag tgtttgccctc tgaagtcaaa gatgaaggag 120  
gtcgtcagga gatttcccc tttgatgtgg atgagatctg tccgatttct catcatgaga 180  
tgcaagcaca catattccat ctggagactc tgtccacctc cacagaagcc aggagaaaaa 240  
agcgtttcca aggacggaag actgttaatt tgtccattcc actaagtga acatcttcca 300  
ccaaactgtc ccacattgat gaatacattt cctcatctcc aacctaaccag accgtgcctg 360  
antttcagag agtgcagatt actggtgact atgc 394

<210> 369

<211> 534

<212> DNA

<213> homo sapiens

<400> 369  
gcaattaaat tgagttcata acaccagggt tcatagcgat aggccatgcg gatttgggct 60  
acatttgtcc tccgatatac atttccagca gggccttcct caaggtaatt gtcgcccaga 120  
aactttactt tctctcatg agaaattcca cactgcaaga cactgttcct tgccacttcg 180  
cacatatcac aggtgctcag cttgaagact tgtgcagcaa tagcatattc ttccattagg 240  
ggctccttgg taaagtggaa ttgcattggg tcatctgtag acagtgagat cattagccct 300  
ttctgaagga aatccaaaaa aggatttttg gcatactcta gaaataggct attgttactt 360  
agtggtgaca tggcgatggg aatttgggct aagaaaaaca agtactgtag cacgggactc 420  
tttttaaat taggccatga gagatatcat ctgctatcat gaatgctgtc atgagatggg 480  
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<210> 370

<211> 265

<212> DNA

<213> homo sapiens

<400> 370  
ctgttcaagg ggattccgcc ccccatgct tattcttttg agctctaagt aagacttaaa 60  
gttctttttg caagcaaaat ttctcactt ttatagggtt taaatgtgca aggaaagttg 120  
cagaaaataa aggagttaag tatttatgcc tgtaaagttg gaaaaaacat tgtattttac 180

aaccattgcc acattggtgt ctttaccttc aaaagtagtt tttaaaatag taatatcttg 240  
gcggaagtca atatctgatt tttct 265

<210> 371

<211> 110

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (5)..(110)

<223> n=unknown

<400> 371  
ttttnagnna accaaagggc aaataaaaaac tggttattaa agctttctaa tacttgaagg 60  
ccacnaggnt naccaggntn aagaacctcg atnntgaatt atacntntgn 110

<210> 372

<211> 436

<212> DNA

<213> homo sapiens

<400> 372  
tttcagtgtg gtgggttggtc atgggttaaa acgttcagat tgtcatgggt taaaacgtga 60  
attggatatg aggáagtgga gtgcacaaag atagttttct gaaagtttta cttggaagag 120  
gacaaaaaat tgagacgaca gtttgaggag gatgaaaggt caagaattct aagctagtga 180  
taaaaatttc gtcaacatca atgaataggt aatgtaaaca cattaatcct gggatggatg 240  
tgagaagagc aaagaaagga atcctggggg aatatcagct ctaaagggtg agtagagaag 300  
gaaggagtga tctgagaggt ggaaggagga gtaggaatta tcatagaaac tttaagcttc 360  
ttgagggctt gtgactgtgt catgttcac attttatctg aaagttctta tcaacaaagt 420  
agcttttcagt aaatat 436

<210> 373

<211> 499

<212> DNA

<213> homo sapiens

<400> 373

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cagcctgccc ctctacctac tatcttgtat ctcctatga gcaaagcttc aaaaagagca      60
aagctttctg aaaacaatgt ttgcacttac tgtctccact ctcaacaaat atccacgctt      120
agtcctcagc aacctggcat ttatttctat tatggagact ccaactgaagc tgttctacag      180
aaggtggcaa tcagctgctt aacaccaaaa tcaagggaca cttccctgtc ctcatattca      240
ttcaactgtg ggctacattt gacattgcag atggctctta aaatttttat cttcatttaa      300
taaatattta ctgaaagcta ctttgttgat aagaacttca gataaaatga tgaacatgac      360
acagtcacaa gccctcaaga agcttaaagt ttctatgata attcctactc ctccttccac      420
ctctcagatc actccttcct tctctactca acctttagag ctgatattcc cccaggattc      480
ctttctttgc tcttctcac                                     499
```

<210> 374

<211> 417

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (76)..(86)

<223> n=unknown

<400> 374

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gttcattgta atgaaaatcc atgttggtta atagaatgcc atcctttacc tacttttgct      60
ctgtatggac gttttnctnt tcatgntcta gtgagctttc cctatatcat gagaagtggc      120
tatatttgtg caaatataca aatataggaa acaaagatt catacctgta ggcaatagtc      180
taacttgtcc aaaccacttt gcctttactg ctatttttat cccaatgcg tagatatttc      240
ccccaggcct atagcctttg tgaaggaaag caaatcatat ctcctgtata ttgacacgaa      300
tctgggtttc aaatgtcatt tccagatttt ttagttaatt gggggttgtc cttttccctt      360
```

aatgtgagag tcattttcct gtatatatttct gggatctctc aggggctggg aaggggg

417

<210> 375

<211> 566

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (36)..(547)

<223> n=unknown

<400> 375

atattttctga cagattcatg taacaaaaag gcatancagt tttcaaattg ttcagctggg 60

atgatcagta tggattgatg cnaagcagtt cgcattctat aattgccttg tacaggtaca 120

attctttccc aagagccaaa agaggatcct tgagaactaa cggaaaagcc taattacata 180

aatgtaaaat actgtttctc cctcattctn agataacnac aggaatgacn ggaaaggaag 240

gaggatgggt aaaagggttg aggagaagaa agaataagag aaagtatact aaaaatatgc 300

ctaacattaa aaaagttagt atgtgttagg tgcattgatcc ttcattcaata acatggaaaa 360

aaatcaaaat aacattacac cacacacaat tggcatatcc tattgtgtaa gcgagtgcag 420

agggtgaaca catcacaata gtgctgaaca cagaatcaca agtaatgtca aaatgataac 480

ttccaaccaa aaaaganaca atcacaggcc aattacttat atacaatcaa ccctaagtca 540

attntgntcc aaataaagat gtccac 566

<210> 376

<211> 324

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (27)..(306)



<223> n=unknown

<400> 376

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gatgtagata attattaaat tgtacanatg ggaaaattga aattcagaga gattaaatac 60
aatgnttgct ctgtgttaca ctgttagtaa gagagcaata catgaaccca agtttgatcc 120
tcaaaatcac gcttttaatt acttgatata tagtgtcttc caatattgaa tctagactag 180
ggcaaattcn cagcncaaaa cnanacttca atttagcant nntgtcgtgc taggacatga 240
ganggattan nattgnngac ncagcctcna tctnnaagta attcntaatt tagccaanta 300
tattanatat ctgtaatata aaac 324
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<210> 377

<211> 488

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (138)..(482)

<223> n=unknown

<400> 377

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ttacagattg acacatttga atttacttat gtaaccttga tgtttgctgc acatgaatga 60
aattatcagt ttgttccctt catcaaaggc actgaatatt taatgtacca aaaagacatt 120
aaacgttata ctcatggnat ttagctgcta agcattgtaa gtaaccgctg acatttctgt 180
taagagaata tttatttttt aagtgattaa acttggtgat tgcttttaac acatttagat 240
agtaatttat tcattttctt tattaactt tgtaagctt tattcaactt tgatctttac 300
caaggaaaca acatgaccaa agtaccanaa anngtannat naacttgttt tttgaaaaga 360
gtntgtgaac aggtacatgg tacaacaaac tgatgggcan gcagtctatg tacttttcca 420
gttgtcattc taagtaatga cccaacttct ctatagggcc cagntatact atttcccact 480
angcttac 488
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<210> 378

<211> 366  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (318)..(351)  
 <223> n=unknown

<400> 378  
 ctcaactccc agagagtgaa catcccgct ctcttctcag gactggtgct ctccgaagca 60  
 ttaagtagga aattgagagt agtagcaagt gagacttagg gggcaggtag gcagaaatca 120  
 gtgatggcat agccgcgcca ccatgaccat cctggccatt gtctcctgtg tctcctgctc 180  
 ctcgaggtct tcaaagtctc atgctgcctt ctccagcagt gctctctgtg atgggagggt 240  
 gggcacaggg tgggtttgtg ggtgattctg ctgaagccag ggagatgacg tctgtccaag 300  
 gacctcagct ggagccangc tccaggaagt ctgtggggga cactgacatc ntgggcatct 360  
 ccttct 366

<210> 379  
 <211> 530  
 <212> DNA  
 <213> homo sapiens

<400> 379  
 aaaacaaaa acatctcaaa gcaaacaagg gaaagctccg caaacagcct ggcagcagga 60  
 aaccacagag agtttccccg taataggcgc ctccaggcgg gggaaaacaa attataaggg 120  
 tgatttattt ttatcttatt acaaacaggt attttccaaa ttttctatga agcacaagga 180  
 gatctttcct tccagaatac tagcaaacac aaaaaatttt attttgtgag tgcttaaaaa 240  
 gagaaaaacc tgaacaaact tgctctccac ccacgcaggt gattctccac ccacgcaggt 300  
 gattcttcac ccacgcaggt gattctgact tttgggcagt cgtcagaaga tcagatagaa 360  
 aacctgagta tcttggcggt agaatgagtt ggacagagag tggatgttgc cccgggggct 420  
 tcaggcacca taccggacat ccagcatctg agatgagtta aaacgcacag tggaggtgac 480

tttcgagatg agggtacact tacaacatac aagttgttta tggcgctggg

530

<210> 380

<211> 556

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (537)..(537)

<223> n=unknown

<400> 380

ggcctcctgt agaccggcgg gtgcagggca cggctcccaga gttaaggggtg tgagtgagac 60

tgctgcgggc aggggttggc ctatgccctc tgctaggggg agaggtggag tttgggtgtg 120

gattaatggg ttctgggtgt ttattttctt ttctctgagt agtgaggcct ccaagaagtt 180

gtagggacct gtttcttcca gacacattaa tatgggccaa aatgtgggggt ctcttcacct 240

gaattaattg gagatctttt gggttgaggc ctcaggcttc atttctcagg acttccaggc 300

ctactcccat tagtactgac cgtgaaacta ttttctgttt ggttactttt tacattctct 360

gtctaattgat ggcataacaa aataaattta aagatttttg cttgggtttat tattaggtga 420

agtgattttt tttaagtccc aggttataga tattatttca gcatagacac tttaaaaaga 480

gagaaaatac ctggaacaaa tcggaaatac gtttgctaaa ataactttat ttggcanggt 540

gttttaataa cagtat 556

<210> 381

<211> 497

<212> DNA

<213> homo sapiens

<400> 381

agcacacaaa taaccatttc attagctaag atacacgtaa tacagccaaa aataagtagt 60

agctttattg atcctctgtc tagtgatcag aaacaataat ataacatgca tcacatacag 120

tacacaatac tcccgatattt cctcaacagg aaataaatgt ccataatata gaggtttcca 180

tatattgttg catttataat actctgcatg ggtatgagtc atcctattta taaagtgata	240
ttgaatccac aaaatataag ctccaagagg gaagagtttg attccattgc atactattgt	300
gtctaaaatc taaataattg ctaaattgat acaataacag taatatatag aacaatgaaa	360
ttcagatact gttattaaaa acaccctgcc aaataaagtt attttagcaa acgtatttcc	420
gatttggtcc aggtatttcc ctctttttta agtgtctatg ctggaataat atctataacc	480
tggggcctta aaaaaat	497

<210> 382

<211> 548

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (426)..(535).

<223> n=unknown

<400> 382	
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tccacctcca tcagtgaat tcttttggtt ccaactaaca gaaccaacc gaagccttct	120
gtaccaaaaa ggtcccatct atctaggctg tgttttagg ccagtgtggg actggcgta	180
agagaaacta gactcagggc cacatactct ccttttttgc ttctgtccat ttgttcattc	240
tctcagactg gctttttcca tgaagttaga atctgagcaa ctggcagctc ctaggtcata	300
tattcccaga tctgccgcta gctcttcagt aaaatgagga gaggtgttgg gtgagtatgg	360
tggtccttaa ttatttgtca agcttttcta ccttgatcct tttcctgtct catggaatat	420
aatatnaatt attgcttaat tcccctactt tctcccatct tgagtcttgc tttgtaactt	480
tatatnatcc atttatnctt tggtcactca natatttaag tatttnanat tctcnacttt	540
atttatca	548

<210> 383

<211> 179

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (53)..(175)

<223> n=unknown

<400> 383

cttctttacc cattcattaa acctatcatc tgtgaaatca ctgtaaaaat ctncacttct 60

gatatttgnt ataatggcat anaganaaac tgtaccctat tggggagcta aaattgtaat 120

aggtaacaaa tataattaac tgtcccaaaa tacagctnnc caancaaact tttntttt 179

<210> 384

<211> 562

<212> DNA

<213> homo sapiens

<400> 384

atttatttaa gcttcttttt aatagatgga tattaatctc ttaaaactaa ataatatatt 60

gaatatttag tggagaaact tttattatat aacagttgat gtcttttaaa atcttgtttt 120

cctagcagca aaattagaat agatagagaa tttgtattgc tgatatgcaa aacctaacaa 180

attatattta acctaatagg ctttcatatt ttggattaca actttcacac cataacttaa 240

tacaaatata cagacgtggc tgacatattc tacatagctg tgtggcttac ttgaaaaata 300

gaacagttgc ttaactggat gactatcaaa atgggtcaaca cagattgatg ggcttgagtg 360

tagcagacag cgggtatgca gatgggtggg tctgtaccgt ttgagaagag atggctgagt 420

ctttaaaatg atttcattgg aatggctttg gtgggtgtgc agtaaagggc atctattcaa 480

tctcaggtgc tgtgcagatg gcaaagccaa gataatatag aaaaatgaga aacaagtgac 540

tatttaaatgt acagtaatgc at 562

<210> 385

<211> 429

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (334)..(334)

<223> n=unknown

<400> 385

tatgcttaaa taacagccaa ctttacctaa acactttcaa taaataaagc acttaatctc	60
ttgttctctc taccctaata taatatgcag caggcctgca gaaaatccga gcaaattgcc	120
tgtacttaat tctctcaagg agtcatgtgt tttaatgtac aggcactctgg atagggtttcc	180
tgcattgtaat aacgtcattt atttgtgatg cagatcatgc attactgtac attaaatagt	240
cacttgtttc tcatttttct atattatctt ggctttgcc tctgcacagc acctgagatt	300
gaatagatgc cttttactgc aacaccacca aagncattcc aatgaaatca ttttaaagac	360
tcagccatct cttctcaaac gggtagagac accaccatct gcataccgcg tgtctgctac	420
actcaagcc	429

<210> 386

<211> 555

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (48)..(48)

<223> n=unknown

<220>

<221> misc\_feature

<222> (332)..(339)

<223> n=unknown

<220>

<221> misc\_feature

<222> (522)..(522)

<223> n=unknown

<400> 386

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ctagcaaaga gcaaggaaag agagaaaaca acaaagtggc gaggcctca gagtgaaagc     120
gtaaggttca gtcagcctgc tgcagctttg cagacctcag ctgggcatct ccagactccc     180
ctgaaggaag agccttcctc acccaaaccc aaaaagatg ctgaaaaagc ctctctcagc     240
tgtgacctgg ctctgcattt tcacgtggc ctttgtcagc caccagcgt ggtgcagaag     300
ctctctaagc acaagacacc agcacagcca cnnntcanng cggccaactg ctgtgaggag     360
gtgaaggagt caaggcccaa gttgccaacc ttagcagcct gctgagtga tgaacaagaa     420
gcaggagagg gactgggtca gcgtgggtcat gcaggtgatg gagctggaga gcaacagcaa     480
gcgcatggag tcgcggtcac agatgtgaga gaagtactcc gngatgaaca accaaattga     540
catcatgcag tgcag                                         555
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<210> 387

<211> 538

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (48)..(48)

<223> n=unknown

<220>

<221> misc\_feature

<222> (289)..(314)

<223> n=unknown

<400> 387

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tcttgccctc aggtctcagg tcttgatatt cattctcaac ctcagcctaa gagttctaaa      120
ctcaagcaat agaatgatgt cagtgatatt cattaataac caaaaggtaa ttgcttccgg      180
aggcattttt gtaaccagga ggtagagatt ttcagtattc acctctgcat ggattacaga      240
ctatctgcaa aaaccggtgt atgaaatatg tctgattgta attttgtgnn nnnnnnnnnn      300
nnnnnnnnnn nnnnagatct gaaattcaga gtgtagctct gagacttgct tccaaagtca      360
tttcccacca catgcagaca tgtgtggaga acaggaatt gatagctgct gagctgaagc      420
agtgggttca gctggtcatt ttgtcatgtg aagaccatct tcctacagag tctaaggctg      480
gccgtcgttg aagtctcac cagtactaca ccactttcct caccaacccc catcctat      538
```

<210> 388

<211> 568

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (543)..(543)

<223> n=unknown

<400> 388

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ctgcagattt agtggaggaa aaatccacac ataccccat cccaatcccc cagattttct      60
tcaacatgcc gcttctgttc ttggaagagt taactgcctc gattctgcat aagagtccca      120
aacactgaga actaggtgtt cttccccttc ctttccttcc aaaaaggcca gcagcctcaa      180
gcaagccaaa gtcctttcct cttgaatgct tagtcttctg aactccactg tcttcacaaa      240
ctcagcagct ggtggaagct ctctgaagaa ctgagacagg aggtggcact gctctgacac      300
catcctttga aggtgacaga gcatctcagg gcttggggga cgccagccgg actttgagag      360
gagacagaag aggtgcttgc agaggtattt caciaagatc agggctctcg cccaaaagtt      420
gacttctgct ttttcaaaca ggtagtcttc ttccacctga tgcattgctt ccacacaggc      480
```



cacgaggtca tcaactctctc ccaacagcca tcccagcagg atgggcagtc cagggggcaa 540  
ctngtcccac tgctggagca gatcacac 568

<210> 389

<211> 557

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (2) .. (48)

<223> n=unknown

<220>

<221> misc\_feature

<222> (340) .. (340)

<223> n=unknown

<220>

<221> misc\_feature

<222> (421) .. (421)

<223> n=unknown

<400> 389

anataacaat atttgcnatt tttaaaggta tttaataatt ganaaatnga ctcttcaagg 60

actacttgta aaaattgcag gaccttaaaa atgcatttgc tttttctatt actttagaaa 120

ttataattat atgcattttt gtatgccttt acaactagca ttatttggtc ccagccttcc 180

tttttcagct ttcattggtga ggttttagtg tcattacctt ggcttctggg atgtttggaa 240

ataggcaata ctgtattaat ttctgctctt tagaacattc tgttcttttg atctagttta 300

ttgcttgata gacactggaa agcagaataa tgcttaactn cttttttttt gctgcttatt 360

ttataaatta atcttttgta agagatttct gacatcatca gcacacatc atatgtttcc 420

nttcagcggc atctggaggt agcagaagta gcagcagccc actggtggta gtgtctgtga 480

agtcctcccaa tcagagtctc cgccttggct tgtccagatt agcacgagtt aaacctttgc 540  
atccaaatgc cactagc 557

<210> 390

<211> 441

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (87)..(87)

<223> n=unknown

<400> 390

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atTTTTtaac agctaacatg atttganaat tttttattaa aaattgatca gaagctagtt 120  
gaaatttctca atgtaaatat aaaatattca ttacaattgt ttttcaaagt aaattcagat 180  
ctaagcttcc tgaaaagctg tactatctca ttcataata gggatgacta agtacttgac 240  
aactactttc taaagaactt aacaaaaagt gactatttga agattacatt tacaacagaa 300  
aggccaacat tctctgcaga gctctcattt tatcatgaaa tgtggacaat caggaacacg 360  
tggatgagtg gtatcaagaa aaagggcatt tcaaaatatt tccactttta ttaaagggtt 420  
gacaatgaag attcataaaa t 441

<210> 391

<211> 503

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (258)..(494)

<223> n=unknown

<400> 391  
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tgtgttaaca ttaagagatt tagaagctca ttcagactga taactaacga ataatatagc 120  
tttcatttgt tggagacttt atgtgagcca gccagttata catgttattt ataattccca 180  
cagtaacact gcaaggtagt tatcaactct attttgcagt tgaggaaatt gaggctaaga 240  
aatatgccat ttaacttnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300  
nnnnnnnnnn nnnnnnnnnn ngcattttga ggtcccagtg agtagctctt ctggtctgga 360  
ttagttcagc tatctgcagt ctgctaacat atctggtgct agatgatcta caatganttt 420  
accacttag taaatcatgt tgatgggaag gttttgttca nggnncctca actctcctcc 480  
atgagactgg tgnaaaaagc tgc 503

<210> 392

<211> 638

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (2)..(479)

<223> n=unknown

<400> 392  
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tggnaatggt catctgaatt gtttgggtcaa ctagaagtta gaaattttta aatggaaaat 120  
tttnaaatta gaaaatttta cacaagcata tatttgaaaa aatgctcaat tactggggct 180  
tttcctctct tgctgtgctt gaaaacttna gtccatgaca tgattgagct canggcagct 240  
tttcanacca gtctcatgga ggagagttga gggtaacctga acaaaaccta ccatcaacta 300  
natttactaa gtgggttaaag ncattgtagn tcatctagca ccagatatgt tagcagactg 360  
cagatagctg aactaatcca gaccagaaga gctactcact gggacctcaa aatgcnnnnn 420  
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnna 480  
agttaaatgg catattttcta agcctcaatt tcttcaactg caaaatagag ttgataacta 540

ccttgcaagtg ttactgtggg gattataaat accatgtata actgggctgg ctcacataaa 600  
gtctccaaca aatgaaagct aatattattc gttagtta 638

<210> 393

<211> 427

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (3)..(100)

<223> n=unknown

<400> 393

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tatttaaaaa gcctaaaaat gatcttgctg gttttcttca gttgagtgtt gtgtaagtga 180  
aaattacttc acaaatccca ctattagcta ttataatcaa atcagctttc actcttccat 240  
gagactgttt ccttcacaag actttgggtg accataacca attttatagt aatatacaac 300  
aaaaaataat gtggagaata gcaaaattaa acatattttt ttaaaaaata gaggtgttct 360  
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<210> 394

<211> 189

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (167)..(167)

<223> n=unknown

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 tgaaaccaca ttgaatgata attcatgaga tcagggtatc caaatcatct tcttctacat 120  
 tgttctctct taaaaataag ccccggtata aacctttggt ggactcngtg ctgtctgaat 180  
 cccagaagt 189

<210> 395

<211> 405

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (101)..(101)

<223> n=unknown

<220>

<221> misc\_feature

<222> (396)..(396)

<223> n=unknown

<400> 395  
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 tgtgtcttgt gtagtttgga actatttttt tttcctaataa tttcttcaga tgccaaccat 180  
 gtctgtcaaa ctctggatga gtcgcctttt acttagcttt ttaagaactc tttttggatt 240  
 cactaacttt tatctgcatt tttttatcca tgctctatta agtgtctagg atcctgataa 300  
 ttatgcattt tctctgaaga tatctatttc cagtaaaatt gactatctag tgaagattgt 360  
 aagccctgat aatatatttt gaagtgtctgt tatgancgga tgtgt 405

<210> 396

<211> 296

<212> DNA

<213> homo sapiens

<400> 396

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taggctggaa tgactttttt cagggtgaag aaaatgaaat tattttttaa aatcgtaaca      120
aaatgacttg aacatgttat gtgatggttt atatgccaag taattacttt tgattgattt      180
attaatattt tttaatgagc acccaaaaac tattgtatag gcagaaaaaa gaactattaa      240
tctatgaata gaaatttctt tagcaatttc attcttaaca gctattattt ctcgag          296
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<210> 397

<211> 341

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (31)..(338)

<223> n=unknown

<400> 397

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tacnaagtca ttgactaatc ctacgccaat acaacagcaa ctngacgct tcaactgaaca      120
tnactccagn ccaaattgtc gtggaagcct ctctctctggg ctgcagaaaa tatttgaaga      180
ncccactgac agtgatttgc ataaactana atctccaagc caggacaaca caggcagcta      240
cttcagaggg aaaacatnat tgctgggttca gcaagcctcc tctcagagca tgnacttatt      300
ctgaaaagga tgaaagggaa actanccttn cnaatggncg g                          341
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<210> 398

<211> 414

<212> DNA

<213> homo sapiens

<400> 398

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tataagccca aatggctctg tgaaatcaga agtgcaaagg tgtgcaaact tgtatctgaa 60
gacctaccag ggacaagcag gtaagagctg atgtgagtgt gtgtgatggg atctgtaagg 120
aactggaaca cacatgtcct atccaaagga atcagctgca gctgcttggt gtcaagtata 180
aagtcaggac ctggcttggc tttaaccgtt tttcaagaaa actggaaatc tggattttca 240
gcgaacatgc ctgattttta aagggttgact caagttttta caaaatacta tgtgggacac 300
ctcaaataca tacctactga ctgatgacaa acccaggagt ttgtgtgtct ttataaaaaa 360
gtttgccttg gatgtcatat tggccgttgg aggacacagt ttctattgta attt 414
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<210> 399

<211> 371

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (2)..(62)

<223> n=unknown

<220>

<221> misc\_feature

<222> (211)..(358)

<223> n=unknown

<400> 399

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antcgtaa at ccaaatttac aatagaaact gtgtcctcca actgccaata tgacatccag 120
ggcaaacttt ttataaaaga cacacaaact cctgggtttg tcatcagtca gtaggtatgt 180
atttgaggtg tccacatat tattttgtaa naacttgagt caacctttta aatcaggca 240
tgtncgctga aaatccagat ttccattttt cttgnnaaac ggttaaagcc aagccagntc 300
```

ctgactttat acttgncaac aaggagctgc agctgattcc tttggatang acatgtgngg 360  
tccagtgcct t 371

<210> 400

<211> 320

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (219)..(219)

<223> n=unknown

<400> 400  
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gttcgcgctg ccccaacttc aaggctggcc gctatgaggt ggagttggac gcgggtgtca 120  
aggacgtgcc ctgccaaacc cggcgcggtg tgtgcggaca gcaacctcgg gcctgtcccg 180  
ctaacagctg gtcttcatgc tgggccagtt cctgcatgng cgtgggtgcc acaaccctct 240  
aaaacgctgg gcgtcaacta cctggatgag aacgtcaagt ccagctgctc gcccgtctaa 300  
attgccatct tctacacagc 320

<210> 401

<211> 497

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (447)..(447)

<223> n=unknown

<400> 401  
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gtagaaggtt gcaggtcaaa tagaagttcc cgtgtgattg catcacccaa cggcactgtt	120
ctgtcatcag gaaatgctga gtgcccgccg tggccgggtg ggcgcgggcg gtggtcagac	180
gctgctctgg agctggctat ctgtggcact gtcaggggct gaggactggc tgggcagaca	240
agtttccagg ccatctgaag actccgacag gggcttgtat aagaagcagg ctatggcaaa	300
gaagaggacg cccagcacct tgtacaggag ccccatgatg agtatgtagc ggctcatggc	360
cgaattctgg tacaccaagc aggagccctg ctggccacac tggctctgcc acagcagaca	420
ggcttgtcga tcaccagcc gaaggantgg ggcccgggat gccctagta ttctaactac	480
aatccactgg attccca	497

<210> 402

<211> 446

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (155)..(155)

<223> n=unknown

<220>

<221> misc\_feature

<222> (363)..(363)

<223> n=unknown

<400> 402

ctcaaattctt tacattcatc agagagtcca cacaggagaa aaaccctata aatgtgagga	60
atgtggtaaa ggcttttagtc ggccttcaag tcttcaggcc catcaggagag ttcacactgg	120
agagaagtca tacatatgta ctgtatgtgg gaaangcttt actctgagtt caaatcttca	180
agcccatcag agagtccaca ctggagagaa gccatacaaa tgcaatgagt gtgggaagag	240
cttcaggagg aattcccatt atcaagttca tctagtggtc cacacaggag agaaacccta	300
taaatgtgag atatgtggga agggcttcag tcaaagttcg tatcttcaaa tccatcagaa	360

ggnccacagt atagagaaac cttttaagtg tgaggagtgt gggcagggtt tcaatcagag 420  
ctcacgactt cagattcacc agctga 446

<210> 403

<211> 621

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (556)..(556)

<223> n=unknown

<400> 403  
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aagggtttctc ccagtggtga actcgctgat gagactgtag ttgtgaagac cgactgaaga 180  
ctttaccaca cacatcacat ttgtatgggt tctctcctgt gtggacactc tgatgaagtt 240  
gaagacttga ggcttgactg aagtacttac cacactcccc acatttatat ggtttttctc 300  
ctgtgtgcac cctctgatgc atgtcaaggt tcaagctcca cttgaagccc ttcccacact 360  
catcacattt gtatggctta tctccagtgt ggactttttg atgggcttga agatgtgcac 420  
tccgaccgaa actcttccca cattcttcac atttgaatgg ttttctcca ctgtggactc 480  
tctgatgggc caaaagattt gaggcctgcc tgaagacctt cccacactcc tcacaattat 540  
atggttctct cctggngtgg gatcctacag tgaattttaa gatctgctct aacgactaaa 600  
tcccttgcca cactcttcac a 621

<210> 404

<211> 392

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (105)..(105)

<223> n=unknown

<220>

<221> misc\_feature

<222> (384)..(384)

<223> n=unknown

<400> 404

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aaatctgtcg tggaatatat tttattttca ttaattcagt gaagntgaga cttcatagta 120  
at tttagaat gcaacttgaa ggtaaaaatt ttactttgtc aatactgaag tctctgctgt 180  
aatccttata tatctttctc cagagaacat aatattgtca aatagatata cttttttcta 240  
ataggtat tt agaagcactt gaaatattct taatctctgc atgtgttaca attcagttat 300  
ttctgtagtt tgtaaactct aaaagtgaca ttaccattat tttagaggat ggctaagtt 360  
gtaattttgg atttttgtgg gaanccattg tt 392

<210> 405

<211> 471

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (448)..(448)

<223> n=unknown

<400> 405

gttgaagaat tcatacat tt tccagcccca aaaaggccac acagaatcac aaacattcaa 60  
cgtgttccac gataatgata tgtatgagat gctcttctt ataaacttta ttacgaagca 120  
aataaaataa tacattcata atatatgaac aaagaaatca tacattaaga atcctgttgt 180

gatttgctct taagagcaaa gagctgcaga atctctaata taaaaaagag gacattttca	240
atgtgtccat tttcctaaga aatgtgtgta tgaaatgcct ccaagtttct catactatat	300
atacttgctt taaagaagga aattatttct catttcattt tccaaatgag aaacattgcc	360
taaattcatg acatccctag gattatttct agtctcaact tccacacaga gatgtctgga	420
aatagaaaac tcttaaggta tccagaantt cagggatata aagctttcca c	471

<210> 406

<211> 409

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (367)..(374)

<223> n=unknown

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agcagcagtg caagcagccc tgccagccac ctctgtgtg cccacgcca aagtgccag	120
aaccatgtcc acccccgaag tgccctgagc cctgcccacc accaaagtgt ccacaggcct	180
ggcccaacct cagcagtgcc agcagaaata tctctctgtg acaccttccc caccctgcca	240
agtcaaagta ttccaccgaa gagcaagtaa cagctttcag aattcatcag gaccaaagaa	300
aggataagga tatttgggct caactcgttt ccacaagctc cagcttcac cttctcatcaa	360
aggctancat ggnntacaca gggagcttct ttctccttag ccagtaatc	409

<210> 407

<211> 271

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (109)..(257)

<223> n=unknown

<400> 407

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gcaacagaat tcgattaaat tacaatggga aacatttttg aaaagctcnt taaaagtcta 120
cttgggaaaa aaaagatgcg gnttcntata atgagttgga tacagctgga aaaaccacca 180
tcttgataaa attgagctgg gggagactgt gcctgccgtc cctacagtag gtttctgtgt 240
tgagacagta naatatnaaa ataacacctt c 271
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<210> 408

<211> 230

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (135)..(167)

<223> n=unknown

<400> 408

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tatgtctttg caaagagaaa aacaacaaga aacacagccc acgggacagg tgagccatgc 120
tgggcccagc ggggnngngg cagctacaca ggaggnnggc agggatngga gggtccagat 180
gctggaacgc ataaatacac agagtgccag acagtccac ttcagcttta 230
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<210> 409

<211> 405

<212> DNA

<213> homo sapiens

<400> 409

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gccatttttc ttccaaaaga attccattcc agcatttcct ctcatgtttt tctgtctctc 60
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ttttttaatt gcatgcagtg catgataatt tcttttcttt catgacatgg cttagcctca	120
cagacagctg aatgtttgtca ccacttattt ggaaacctca gggaataatt gtgttaccag	180
cgtctgttct gaatgttttc tcatttttct ccaatttttag ccatgacagt tgaaaaagca	240
agtccagtggt gtgatggaaa tttccggaat cgttctgtct caccttgtgc aaattccaca	300
gttgggggttg ttaagatgac acctctttct tttattcctg gagcaaaaat aactaagtat	360
ttgggataat taacatgggt tttattcgag agactacttc tcttc	405

<210> 410

<211> 484

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (317)..(358)

<223> n=unknown

<400> 410	
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atgtgactac agtggctcag ttcccagatg taatgctgag agactgtcca gtgcgctgcg	120
ttctagaact gctacaaata tgacacaatt ccatgctgca cccacagaat agtgagtagt	180
gtgtaggcca gggcaagaaa aagaagagca ataatattct agttattgta ggccagggga	240
cccacatcca cgatatcggt tttttacagc tcattactga atcctcacia taaccccatg	300
gggtagatat tactgtnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnta	360
agtaatggac tgcaaggaca ctctgtctct ggcccagagg aacagctgga ggatgccagg	420
caagatgtgt gtttaaggggg tctgcagagt gggggtaaac tgattctgga ttactcataa	480
tgta	484

<210> 411

<211> 371

<212> DNA

<213> homo sapiens

<400> 411  
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tcagggatgg agaactcctg gcctctcaac atgttccatt tctgaagagc tccctattga 120  
accataccc tccacccact ggtcggagtt ctacattaat gagtaatcca gaatcagttt 180  
acccccactc tgcaggaccc ccttaacaca catcttgccct gcaccccca gctgttcctc 240  
tgggccagag acagagtgtc cttgcagtcc attacttaac ctcgtaaagc tccagtggtc 300  
ctcatctata aaagggtata acagtatatc taccccatgg ggttattgtg aggatcagta 360  
atgagctgta a 371

<210> 412

<211> 371

<212> DNA

<213> homo sapiens

<400> 412  
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aacaaatctc tgttgatatag aatactgttg gttaaaatat atcagcagct aatagctcat 120  
tttaaataga ttctgaaagt tcaagaatth caggttgcca gacactaata tactctacaa 180  
aatcagaaaa ggctcattac tgcttactta cacaacaaaa aatttcctaa aaatcatttt 240  
taaatatgth tgagttcaaa acataaaaaat gccatgttac gatattttta aacttaatga 300  
aactggatat atttgctgat tcttgtaaga aacacaatca caaataaagc tcactctgtt 360  
gtccaaaccc a 371

<210> 413

<211> 274

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (106)..(266)

<223> n=unknown

<400> 413  
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 tttttatggt ttgaactcaa acatatttaa aaatgatttt tagganattt tttgttgtgt 120  
 aagtaagcag taatgagcct tttctgattt thtagagtat attagtgtct ggcaacctga 180  
 aattcttgan ctttcagaat ctatttaaaa tgagctatta gctgctgata tattttaacc 240  
 nacagtattc tataacaacag agattngtta agga 274

<210> 414

<211> 480

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (47)..(47)

<223> n=unknown

<220>

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<222> (152)..(152)

<223> n=unknown

<220>

<221> misc\_feature

<222> (444)..(476)

<223> n=unknown

<400> 414  
 aataaaacaa cctccaaaag atacctcatt gcagattttc gccaggnttc aggtgcttag 60  
 gttttggcac atatcttctt cactttttcc tatagtgttt ttaacctgtt ataattggaa 120  
 tgatagagat gtatttcaga attttgcatg gnccaaatca atgatttttc tttttaatat 180



gtaaagtatt tcattaacag tgtagattct ttctgatggt tggggagcca tgtttaaaaa	240
tgtagtatgg agcaattgaa aaaggggtct tttccctag cctaattctt actaatctca	300
gaaaacaaag atcaaataga ctgtgaagtt gaactagtcc tcttagtgta gtaaccaaatt	360
ttaggaaaga tcaggataat ttaggaagga aagtaatcat ttatttaatt attataatta	420
taaaccaatt attttaagtt tggnatattt tatggtataa aaccattacc atggtnttaa	480

<210> 415

<211> 158

<212> DNA

<213> homo sapiens

<400> 415	
ggacgtggag ctggtgcccg aggacgacgg gacggcctcc gcggaaggcc ctgatgaggc	60
gggtcgggcg ccacccgagt gacgacacg gccgtggggc ctggcaggcg ctggacagcg	120
cccaggact gggacattaa acctgacctc cctcctc	158

<210> 416

<211> 106

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (90)..(90)

<223> n=unknown

<400> 416	
agcgctgcca ggccccacgg ccgtgtcgct cactcggtg gcggccgacc cgctcatca	60
gggccttcg cggaggccgt cccgtcgctn tcgggcacca gctcca	106

<210> 417

<211> 613

<212> DNA

<213> homo sapiens

<400> 417

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ccctgggtgat ttgtttgcac attagagttt gaggaacact ggtgtaggtt tctggttact 60
catagagttg ttcccccttac tcagggtgcc accccagtgg tggatggggg agcgaggcgg 120
accatgtgac ttggcatgaa cacactgggg ccacaagatg cacatctgat acataatcta 180
agactgttgg gttttccttt agctcatagc atttccatca agggatttgg tagtctccag 240
ttgctgagac aaagtgaata gagaatctca tgatttattt aaaaacaaaa ctattttaat 300
atgtcccat tttatttata tcttactttt tattagccca aagataatta aaccgaaaa 360
tactgtagac tctgtataat ttaggcagtt ttatgaatat ggattttaac tctgacctaa 420
atgagctgtc tagtgactca acaatagcta cctcttgctt caagatagta ggaactgatc 480
agcttataaa gctgatgctg ccagttctg ttctgagtcc agtgtgcata gctctgggct 540
cccaccatgc ccgttagcct gtgaaattga tttttttaa tggttgatca ggcatttggc 600
ctatagccaa aga 613
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<210> 418

<211> 463

<212> DNA

<213> homo sapiens

<400> 418

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atatatgttg gagtatattt attagtatgt aattttcccc tgggttttgt tttggtcatt 60
ctctttcaga gtgagcatca atactccatt tttctacctt acctgccctt tgaataaacc 120
tgaacttgca ctgatgatgt taaacatggt tgaacacttg accacaacat accccattaa 180
ccctgcatgg aagcaaccca tctgacaacc aaactctggg ttgttatttg gaagccgaaa 240
tatgcatcat gagtgcattt gcgcattacc tgttacataa gcacagcaaa tgcttggtga 300
tacattaaag ttctgcttg acaatatgat cttaatatg cagacacata tcacctgata 360
ctaggtaatt gtatggaaat tatgagaagt aatgggggag aaagtataaa atggtgactt 420
ttctagtata gggattattt tactgactct tggagtcaga cag 463
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<210> 419

<211> 353

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (23)..(23)

<223> n=unknown

<220>

<221> misc\_feature

<222> (172)..(335)

<223> n=unknown

<400> 419

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atggatctaa gtatgcttgc atcaagggtga atctcctagt ctccactcat tctagactgt      120
cactcctaaa cctactaac tgaaattcct tagtttatgc ctctaactca cntcttggtt      180
ccnccattca aggacntatc tcccagcnat caaaatccac agaatgnaat tcattttag      240
agaaaatgac tgtggagttt gagaactggt tcatagatga atgacattaa ttaaggntat      300
catctctaga aagcctggag nttctgtaaa ttatnaacta ttcactctca ttc      353
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<210> 420

<211> 300

<212> DNA

<213> homo sapiens

<400> 420

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aaggaacaag aaaaagactc agaaatgctg cagtgaataa taattccact tacacagtgg      120
gggactcaaa gtcagccaca tttcacatac tgttactgaa gaaagcacca agtcttaatg      180
gaacaaagac catagaatga attattttat ctctctccat gatgctgaga ggaagcttcg      240
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tattctgatac tctgagtga tccctttgtt ctctgtttaa aaaaatctaa aaagaaaaag 300

<210> 421

<211> 70

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (20)..(61)

<223> n=unknown

<400> 421  
agagatcaga atacgaagcn tccnctcagc atcangggag gngnnaanat aattcagtct 60  
ntgggtcttt 70

<210> 422

<211> 402

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (190)..(192)

<223> n=unknown

<220>

<221> misc\_feature

<222> (386)..(386)

<223> n=unknown

<400> 422  
catgaatggt atttcagcaa atggtgtgag caaatcagaa aaacaactca tgatagaaaa 60

tggaaaaaag cagaaaaatg gaaaagcaaa aggagattaa attgaactgg gccttaactg	120
ttgttgacag tgaggaaaaa ctcccatatc atataaaatt tcagggaaaa cagaagcaaa	180
ggagagcttn gnggtgggga gaaaagacaa atgtgctcta tgtcctagta actccttagac	240
tgagtaaagt gttaatacca taccagatg ttttatttat gaagttttta ttttaaacad	300
tttttttaaa aaattagcct tgatattctc cagaccaaag caatcattaa gtgacttttg	360
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<210> 423

<211> 439

<212> DNA

<213> homo sapiens

<220>

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<222> (317)..(435)

<223> n=unknown

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ctaataaaga catgagttgt ttcattgttc aatcagacaa taatcttaat tttcataata	180
tatttctgct actaacagga gtattcaaat gctgcctttt catcacaaaa aattgtttcc	240
ccacagtgat ttgtgcctca agtcattgtg atctctgggt caccagacaa gactttactg	300
caattctttc ttattttnnnn nnnnnnnnnn nnnnnnnnagc ctctaagatt ctacagagat	360
cagcagattt taaaaatttn nntacaaccn tnntgttact ctgactagag gtggagagat	420
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<210> 424

<211> 401

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (62)..(62)

<223> n=unknown

<400> 424

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ctttgttgga aaaagatttg aagcaattgg tggagtcaac agaatgggag gttagagaaa 180  
gattaatgcg acggacttaa aatgggtcag agcagggatc ccaggatgtc cagactgaat 240  
ggaggggtgga aagagattaa gtacaaagtg aggaagatgg aagatgggtg aatagtgtg 300  
aatatcaaga gtgtacatat catccaaaag agatgtttat atccactaaa tgatacagct 360  
gaatgaagaa agaatgctgg agaaaatgta aggagtttgc a 401

<210> 425

<211> 550

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (486)..(486)

<223> n=unknown

<220>

<221> misc\_feature

<222> (538)..(538)

<223> n=unknown

<400> 425

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cagctagtag aaaggagtaa ggagcaagaa aggggggcac acattcctta aggacagttt	180
ctggaagcac cacataattc catttacacc cattggtcag aacttggtca cctggctgta	240
tctatcagta aggaagtcag tcttgtgatc agtcaaaaca ctaaatactt tatttctgtg	300
gaagaaggga atagtaaata ttaaaggaca ccagcagtct ctgccacact cacctgtatt	360
tgttccaact tcaatgtgtt tctgtttctt gccacttctt ctagattgat ctggagcata	420
gcagagagag attcttattt aatctttcaa acaacagagt gaggtaggca ttactattac	480
atttantcta cagacagaat aaaaatttaa agaagtactg acctgtgtaa gtcacacnat	540
tacaaagtag	550

<210> 426

<211> 354

<212> DNA

<213> homo sapiens

<400> 426	
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tagccttttg tttttatggt gcttagattc ttatgtatac tgaatatttt attaacatgt	180
agcatcaggt tgaacatgct tgtcattgat atatggaaga tgctatagtt agaagtgaat	240
ttgttctgct ttcttaatat tttccatgct tagcagtga aaacagggtt tgccccagta	300
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<210> 427

<211> 408

<212> DNA

<213> homo sapiens

<220>

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<222> (136)..(136)

<223> n=unknown

<220>

<221> misc\_feature

<222> (360)..(400)

<223> n=unknown

<400> 427

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accctctctc aaaaancctc ctttcaagag gccctaactc acttctccca catgcacca      180
cacggattta ggagcttggg catgctctc atttccatat attttttagtt tcttcttcac      240
tgcaataaat ataaagttgg caatgctcat acaccacagc acagacaata tttcaggctt      300
tagcatacaa ttgtaaacag tgactagggt aaaaaaataa aataaagtaa gttggacttn      360
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<210> 428

<211> 421

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (98)..(130)

<223> n=unknown

<220>

<221> misc\_feature

<222> (238)..(416)

<223> n=unknown

<400> 428

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 ttttaatggn agaaccataa agctatttga cactcttatac actaagagaa gaagtgtaat 180  
 agattcataa gctttgtaaa atgatattcc ttgtatgctg ttatcacagt cttttggnag 240  
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 acagccttat ggttcccatg ctataatcan cagggatgta tttgattcag ttaagataga 360  
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<210> 429

<211> 442

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (380)..(402)

<223> n=unknown

<400> 429  
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 ttcacataac tttcatctgt atttcctctc attactagtt cttctacatc ttttagaatt 180  
 cttttatgag cagtattgtg tgctgtgctg ggggtataaa aatgaaaaag acatagctcc 240  
 taagtaatcc tcaggagac gttgctccca cagttacccc agcacatgtg tgctaagggt 300  
 ttctcttttg cacctgtaac agagcacagg acacagaaaag aactacccag ggtggcaagc 360  
 tggagcaaag ctgagttccn aatttttggt attaacaatg gntaatattt atcgagtgtc 420  
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<210> 430

<211> 588

<212> DNA

<213> homo sapiens

<220>

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<222> (19)..(19)

<223> n=unknown

<220>

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<222> (112)..(580)

<223> n=unknown

<400> 430  
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gnaatcatc ttgataaacc atataaaggg agcaatgtca ccttagatgt caattttggg 180  
gcaggccttt taattttattn tgttccanna ttaaggaat gccctatatg gatcatagan 240  
ggcatatttc tcaaagctat gnagggcata nnactctgga aacttacaaa taaaaaggaa 300  
gctttaanac aactgggata taccaanaga aaacatcnat ctaacgtttt naccatgang 360  
gctggcactg agtaagcact cgataaatat tagccattgt tnataacaaa nnataggaaa 420  
ctcagcttgc tccagctgcc accctgggta gttctttctg tgcctgtgc tctgttacag 480  
gngcaaaaaga gaaacccttn gcacacatgt gctggggtaa ctgtgggagc aacgtctccc 540  
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<210> 431

<211> 431

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (420)..(420)

<223> n=unknown

<400> 431  
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 gcaçttttaa agaagcagcc caatcaattg agcagagact gatgaaaatg gatcaçactg 180  
 caatccaccc acatctactt gatatgaaaa ttgggtcaagg caaatatgag caggggttct 240  
 ttccaaagtt acagtccgat gtcttggcaa caggaccaac cagtaacaag taagcatgtt 300  
 cttcacttga gtagttgggt gaaggaatga atgaagggtg gggctctctgc aactcaaagt 360  
 gacaatgctt aactattaaa catctatctg attacttttt tcatgaccac attaatgcan 420  
 ttgaaatatg g 431

<210> 432

<211> 429

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (60)..(60)

<223> n=unknown

<220>

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<222> (172)..(174)

<223> n=unknown

<220>

<221> misc\_feature

<222> (276)..(428)

<223> n=unknown

<400> 432  
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 gaagaacatg cttacttggt actgggttgg cctgttgcca agacatcgga cngnaacttt 180  
 ggaaagaacc cctgctcata tttgccttga ccaattttca tatcaagtag atgtgggtgg 240  
 attgcagtgt gatccatttt catcagtctc tgctcnattg attgggctgc ttcttttaaa 300  
 gtgctgcant tctganatat agatgtccgc aagtgggtgc ccttacatta tacagnetta 360  
 ncttatcaat ncgagtgtcn aagagccgaa gcaaaggatc tttcncttcc cactgngaca 420  
 taactcgng 429

<210> 433

<211> 356

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (129)..(129)

<223> n=unknown

<220>

<221> misc\_feature

<222> (255)..(349)

<223> n=unknown

<400> 433  
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 taatatagnt ataataatta taaatgcatg ttctaggtgt gatgatatga cagagtagag 180  
 taattacctc tgcttggcat cgtcagggat ggctttatag aggagaagat tcttgagctg 240  
 agtcttgaag aaggnatagt agaagtttgt cttgtggatt tggtgaaang gggaaatatgn 300  
 atgttgata agtagaagtt cgagaaccat atangaaaga gaaactggnc catgtg 356

<210> 434  
 <211> 407  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (301)..(352)  
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<400> 434  
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 gtctgcctct cctcattgcc cagatgcctt gtaaggtct tctgaaggta aagaaacaca 180  
 tgaaaatgca cattgcatat ggtgatgtag taatgcctac atgtgtgcct aacacacctt 240  
 tattgggtga gtcataggag tacaaagagt aattgcacag aattaaatcc attcatgctc 300  
 natttttgct ctttctagta ttttagctat aacaacaaac agcattctgg angggctaac 360  
 tgtgctcacc tgttccaggc attgtatgaa ggctttgcaa gccatat 407

<210> 435  
 <211> 479  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (207)..(453)  
 <223> n=unknown

<400> 435  
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cttttaa	atg	gtgtttt	gga	gaactgg	ctc	ttgggtt	ccc	cagaatt	aga	agggcc	agaa	180
ttttat	ctca	gaggaa	agta	taactana	aaa	gaagca	attn	aaaaaaa	agg	gaaaaga	aaca	240
acaaaa	aacc	atatata	gct	taccatt	ttt	ttgact	tcag	cngggg	agga	gggtt	ctggg	300
aatgaga	aac	agtgtct	ctca	ttggat	gcat	gtcacag	aga	gctggg	gaga	ngagac	ggtc	360
gtgtcag	tat	ggcact	tatt	tcactcat	tc	ttgatt	tcta	gggtcag	tca	taaata	acat	420
gaaatgt	ctct	ggcccat	cg	ctgact	na	ggn	ttcata	caagcag	tct	agacat	cta	479

<210> 436

<211> 230

<212> DNA

<213> homo sapiens

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		tgtagatt	g	tattaat	gag	tgtttct	ggt	ttgggcat	gg	gaagtga	tgg	gggcctga	ag	120
		ttattttg	ca	gtggcta	atg	gcactga	gga	atttcttt	t	tggtgc	attt	ggtttac	act	180
		catttctct		cctaatt	ggt	agttcatt	tg	taacagt	ggg	tgagtgt	ttg			230

<210> 437

<211> 267

<212> DNA

<213> homo sapiens

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<223> n=unknown

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		ccatcaaccc	aaccaatt	ag	actatt	ttcat	gggaga	aaaca	gtatcc	ctcc	tttctt	ctcc	180

ctccttttctt ccaaactct acccactgtt acaaatgaac taacaattag gagaggaaat 240  
gagtgtaaac caaatgcacc aaaaaag 267

<210> 438

<211> 320

<212> DNA

<213> homo sapiens

<400> 438

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gatgcataca gaccttggtt gaatatggag caaatgtcac catgcagaac cacgctgggg 180  
aaaagccctc ccagagcgcc gagcggcagg ggcacaccct gtgctccagg tacctgggtg 240  
tggtggagac ctgcatgtcg ctggcctctc aagtggtgaa gttaaccaag cagctaaagg 300  
aacaacagt agaacgtgtc 320

<210> 439

<211> 549

<212> DNA

<213> homo sapiens

<400> 439

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caaatactca tgcaattgat gaaatataaa atggatcag tggcttggtg aatgtcctgt 180  
gggtaggggtg aatcaatcta ctcttaaaaa acatacattt tcccaatcat gcttttaaac 240  
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gtctactact ataaatttaa ggcacactga tattctgttc ttctgctggg gaggcattgt 360  
tttcatgggt ctctttccaa agaggatagt ccagaaattt ccaataattt ccaaagggca 420  
tcagtgagag aaaatttaaa aagtgattta caagaagagt cttttgactc tggctcagca 480  
atgtgcttta tgctgtagga tttcttcatt tttctattga tgtcattatg ctgccttatt 540  
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<210> 440

<211> 384

<212> DNA

<213> homo sapiens

<400> 440

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ctatatagga gaggttgcaa atgtcagtgc ctcagaagga ccaggcaagt tctgtaaatt      180
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gtgttgacaa ctaactcaaa ctct                                     384
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<210> 441

<211> 547

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (528)..(528)

<223> n=unknown

<400> 441

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cctcttgccc ctttgcttgg actccaagtc tctctcttgg gcagccagga cccacccatg      180
gggacagccc tathtagctt ctgctctggg aacagcaaaa atcaggatgg tgggaggggc      240
cgagtcttgt cttgtccttt catcatcatg actgttgagt tcttggtgt gccatcacg      300
ccacagcacg acgctgcca aatgcccc aacctactgc ctgatgcagg tgccattgcc      360
attagcggtc atcgacagct tagggcagca ctttccaacg ggtgcccatt ggacaccagc      420
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ctgcgagatg cttttgtggg aaaggggttt gtggttcaat aactttcgga agtgctgcac 480  
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<210> 442

<211> 530

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (523)..(523)

<223> n=unknown

<400> 442

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 aaagcatctc gcaggctggg gtcccatggg caccgcttg aaagtgtgc cctaagctgt 480  
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<210> 443

<211> 212

<212> DNA

<213> homo sapiens

<400> 443

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taaactccat aatcttaata tttatgacca caacttaaca attaatcaaa ctattaaaca 180  
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<210> 444

<211> 335

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (331)..(334)

<223> n=unknown

<400> 444

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 aaagaaagac tgaaacagaa gtaaaaatgg aagaaaaaga ttgatctgc aattataagt 180  
 aatctgcctt ttgaaattag cttcctgaga ctgagtcctg attggagaac tgttaaagtg 240  
 tttcagagga gcaggggttg tctatccgag cagtgtctcc tgaatcatac tgaatacttg 300  
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<210> 445

<211> 348

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (287)..(337)

<223> n=unknown

<400> 445

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gagaagcaag tcactatttg agttcaaata aagctgggtc gattttctca agtattcagt	180
atgattcagg agacactgct cggatagaca acccctgctc ctctgaaaca ctttaacagt	240
tctccaatca ggactgagtc tcaggaagct aatttcaaaa ggcagantac ttataattgc	300
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<210> 446

<211> 568

<212> DNA

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<222> (487) .. (487)

<223> n=unknown

<400> 446

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tagagctgcg ccaaagaaaa aagccaaagt cttcagaaaa taaggaatct gccaaagaag	180
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ttgcaaagat tttcattggc tgtcttgagc cggttactag tggatgatg tatgctctct	300
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aaatcacggt tcagggtgac agtgccattt attactccta ttataaagat atgttaaagg	420
caccttcatt tgaaagaggt gtttacgaac tgacacacaa taacaaaact gtatctctga	480
agactanaaa tgcagtgcag caaatgtctc tgtatccgga acttattgct agcattttat	540
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<210> 447

<211> 362

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (199)..(346)

<223> n=unknown

<400> 447

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aacttctact ccagcaatac aacatacatc ggtgacatca aataaggcag tcagacttct 180

gtttatttta tttcttaacna ttctcactaa gatctctaaa gagagtctna ttcttttggt 240

taagtagcat aagagagtct nattctttan aaccattatg tttacatgag aaagtatctt 300

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<210> 448

<211> 289

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (121)..(121)

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<222> (276)..(276)

<223> n=unknown

<400> 448

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tgcgggtcgc ggcctggagc cgttcgtaat gcgagaggcg cgggcgcggc tggcggccac	120
naggttgaat atatttcagg aaagggtttt ttcaccacct gttctgattt gaatatgttg	180
aagaaattaa aatctgcaga aagattatct ttgctgatta aaaagcagtt tccactttat	240
tattcttctg taagtaaagg gaaaatattt aatganatgc aaagactta	289

<210> 449

<211> 276

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (263)..(269)

<223> n=unknown

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tgatacactt aagtgaaccc ctgaaaacct ttattttgaa attgaagttt ttgctcagaa	120
actgggcaga acttttcaca ttctgacaga agataaaact taagtctaaa aaatattcgg	180
taactttttt ctcaaaaaca ttaagtactt tagaatataa agcagaaaact cttaccaagc	240
atgtgtaccc atcagccaca ccnctgtnt ttgggg	276

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<211> 339

<212> DNA

<213> homo sapiens

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tttcttttta actgggttcc cagctagttc cattcccttg aattcagtg caaagtcact	180
gtcaataaaa gggttttact cttcttcctt tttgaattgt aacttgctta ctgaattcag	240

gaattgggtg atcaaaagat aactgcttat tatagtaaga taaccttgga acagaactgt 300  
gattaaaaac ctgaataata aaaaacacac aagacccat 339

<210> 451

<211> 298

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (142)..(266)

<223> n=unknown

<400> 451

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ctgaattcag taagcaagtt acaattcaaa aaggaagaag agtaaaaacc ttttattgac 120

agtgactttg ccaactgaatt cnagggantg gaactagntg ggnacccagt tannaagaaa 180

atatttgctc ctggactact tttactgaga tactgttagt aatgncttgc attcacactt 240

tcttgaattg tgannggnta attgtnaaaa gttagatgga gaatcacagt tttgttgt 298

<210> 452

<211> 485

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (36)..(483)

<223> n=unknown

<400> 452

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cagttttcac aacactgcaa gaaggggatt atcacacaaa gnacctaggc catgggtatgt	120
gcttaataaaa tgggtggctgt gcttggtggt acctgactct ctactcatcc tttgggātnt	180
gggtgnctgc ntgtccgtcc agatgnccgn gagatctcac gagtntctct tgantgcaaa	240
gacctcattc tcattatena accaggctgg tcccaganct cagagttcag gtnttcatgc	300
tggaatcctg ctgaagcnnt gaacgtngag tcaggagatg tgggtttgag tcctgagatt	360
tgctgtgatt catcnggncg atggggtttt ganacctttt ttaaaggat gaaatgatga	420
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<210> 453

<211> 468

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (92) .. (107)

<223> n=unknown

<220>

<221> misc\_feature

<222> (349) .. (445)

<223> n=unknown

<400> 453

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catctgccac tccgacgcac cttcttcctt cggttccacc cctcattcag ccaaagcgct	180
ctgactgagt cccagaggcc tcccgtttgc atttctggct caaagtctgc agctggccct	240
ttccatgcag ctggagttct gcagtcctat gaacctgcca ccatgatagt ccagatcagg	300
ccacagtaat ggtggctggg ctgggagcct gagatgtag caggaagana gctgctgggg	360
cagaaagggt gctgaggggt agcgtagagt ctctgtgct aaatccccgc agctgaacag	420

cacttgaagg ntacaaaact ctttnaactc ttggtctctt attgtgat

468

<210> 454

<211> 504

<212> DNA

<213> homo sapiens

<220>

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<222> (28)..(28)

<223> n=unknown

<220>

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<222> (187)..(324)

<223> n=unknown

<220>

<221> misc\_feature

<222> (458)..(501)

<223> n=unknown

<400> 454

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acctgttgac caagttccag agcagccgca tggacgacca gcgttggtccc ctggacgatg 120

gccaggccgg ggctgccgag gccacggccg cccccaccct ggaggacagg atcgcccagc 180

cctcgangac ggnctcgccc cagaccgagg aattcttcga cctcatcgcc agctcccaga 240

gccgccggct ggacgaccan cgggcnagcg tgggcagcct gccggggctg cgaatcacc 300

acagcaatgc agggcacctc cgangccagc gcgagcccca ggagccgggg gacgacttct 360

tcaacatgct catcaagtac cagtcctcca ggatcgatga ccagcgctgc ccaccactg 420

acgtactgcc ccggggccct accatgccgg acgaggantt nttcagcctc attcagaggg 480



tcgaggctaa gcncatggac nagg

504

<210> 455

<211> 591

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (90)..(548)

<223> n=unknown

<400> 455

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cctgtccctg ctctcgggtg cngncctgcn cctccagaag caggtcacct caccangncc	180
agatctgcct ctccatccta ncctganagt ngggcctaga ngnaccctcc tagatggaac	240
tncnagcnct ggnnnctgtn nnnncatggt agganccctn gcagtcttgg gaggtgccaa	300
ggctgggtct ggacaggagg aggcaacctc agggccctgg ngcccattctc aggtccagc	360
aggtcctgcc agtcctaggn tcccgaactt ngtgccctgt ganccccctc cccatggaga	420
gancngtgat gtcattctcc ccagctggtn ggagngtggg ggttctcata tngnggtct	480
gcnnngttga gctgagtga gctccccag cttccactga ccaccccccc acttnggtga	540
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<210> 456

<211> 488

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (454)..(454)

<223> n=unknown

<400> 456

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tttcaccagg ctgtcgacgg acttcaggaa gtgcagcgcc aggcacaaga ggggaagaat      180
ataggcacca ccaagaaggg aatcggacca acctactctt ccaaagctgc ccggacaggc      240
ctccgcatct gcgacctct gtcagatttt gatgagtttt cctccagatt caagaacctg      300
gccaccagc accagtcgat gttccccacc ctggaaatag acattgaagg ccaactcaaa      360
aggctcaagg gctttgctga gcggatcaga cccatgggtcc gagatgggtg ttactttatg      420
tatgaggcat ccacgggccc cccaaggaa gatnctggtg gagggtgcca acgccggcct      480
cctcggac
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<210> 457

<211> 541

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (495)..(495)

<223> n=unknown

<400> 457

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tttgaatata atttttaaaa atatacacia ggctggcttt ccaatgttta aaatcattgt      120
agaaaccaac aggttgaaca gaaatataaa agtacagaaa atggttttcc tgctttggtg      180
ttggttgtgg cggccgagga acgtgactgc tgctgtttac acaagtccag acgtgccag      240
ggcctgttgg gatcagctca gtctgtgact aaaacagctg gatcatcgac tctcttgact      300
tgccaacacc aaccatttg actgcgactc ccacgtgatt ctccacaaag cggatgtagt      360
tctgggcctg tgggggcagg tcctcccacc tcctggcgcc tgtggtgtct gctttccacc      420
caggcagcgt ttcataactca acttcgacct tctgaagcat ctctgggtta agctgggaaa      480
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tagggaatcc ttttnccggt cagcttgat gagacaccga cttaacctc acccagtacg 540  
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<210> 458

<211> 516

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (226)..(226)

<223> n=unknown

<220>

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<222> (370)..(494)

<223> n=unknown

<400> 458

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cttgctgtca cgggcctggg gtcgcctcaa tcaggtggag ctgccacact ggctgcgcag 120  
gcccgtctac agcctgtaca tctggacgtt tgggggtgaac atgaaagagg ccgctgtgga 180  
ggacctgcat cactaccgca acctcagcga gttcttcgg cgcaantgaa gccgcaggcc 240  
ggcctgtctg tggcctgcac agcgtggtga ggcctgaccc tttcctctg caggaaacag 300  
gactttttcc tgccctccca gcacagcccc cctggctctcc agcgtatctg gaaggggcag 360  
gatgacaagn ggaggtgggg gctgtctcct gnnngggagga gaccctgctc tccctggcag 420  
caagcctctc ctncncttcc agattagccc atcggtatga aggatnctca actttgggca 480  
ggtgaagaac tgtnaagtgg agcaggtaaa aggggt 516

<210> 459

<211> 490

<212> DNA

<213> homo sapiens

<400> 459

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tcaatgatgt ctctcctgca ggagaaattc acagcatccc caggggtcaac atgaaatctg    120
gccctgtccc cgccactggg ggctccccag gcctgcggtc ctgataaact gggacagggt      180
ttccaggcac tgaccaacta tccaccaagg gtcctctgcc tccaagacag accctgaatc      240
aatagcagca actttcccat atttcatgta gggatatgtg gagggggaca ggaactctcc      300
catttcccca gctgggccta ctacctgcct gccctgttca ctctgggtgcc atgaggcagg      360
ttcagtgatt gattggtctt gcctgctgca gaggacctgg ccagctccag aagggtcact      420
catcagggtc tgcaaaggtc tgtatcatta atcagtgctc tcagtgctct .cagaagacac      480
tagcagagtc                                     490
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<210> 460

<211> 518

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (12)..(12)

<223> n=unknown

<220>

<221> misc\_feature

<222> (241)..(267)

<223> n=unknown

<400> 460

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ggagcccaag aaaaagcacc cagatgcttc agtcaacttc ttagaattct tctttttttt    120
atgttcagaa aagatggaaa ttcatttctg ctaaagagaa agaaaaaatt tgaagacagg      180
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gtgaaggtga acaggcccat tataagaaag aaacaaaaat ctatattctg tctacaagga 240  
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnaga aagaagttcc aggattctaa tgtaccaaaag 300  
 ggatctcctt tttcttgttt tgttctgaaa atttcaccaa aagagcacag gagaacatct 360  
 tggctaattc attggcgatg atgtaagaaa actgagagaa atgaaagaaa tgaagaatta 420  
 ctgctgcaga taatatacag ccttgaggaa agaaaggctt taagattata gatataaagg 480  
 ctattgctgt attctgggga taaaagaaa gtctgatg 518

<210> 461

<211> 163

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (104)..(156)

<223> n=unknown

<400> 461

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 ataatatctc catatatatg taattgattt gtactatgca ctantaaagc ntgncttaga 120  
 tttctgttct agtttaaacc ccgaaacagt accagncaag gtt 163

<210> 462

<211> 519

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (387)..(500)

<223> n=unknown

<400> 462  
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 gagagatgtg acgaaaacac caggaccagg gtttggtatc tatgcagtgg ttcacctcct 180  
 ccttctctgtg atgtccgttt ggctccgccg gagccataaa gaccattcct actgggatat 240  
 ggctctgcc aatttcaagc acgctattgg tctgtcctgt gagctggtgg tggagcacat 300  
 tcaaagcttt ctacattcag atatacagga cgagagcatg atcaatacca tgctgaagga 360  
 cctctttgag ttgctggctg cctgtgnnnc caagcccact gaaaccatct ccagagtggg 420  
 gctgctcctg tattagatac gtccttgtga cagcnggcc tgtgggtcac tgaggagatg 480  
 tggaggcttg cctgctgtgn cctgcaagat gcgttctct 519

<210> 463

<211> 87

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (17)..(87)

<223> n=unknown

<400> 463  
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 ancactaana aaanatgna aattcan 87

<210> 464

<211> 320

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (80)..(315)

<223> n=unknown

<400> 464

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tgagagaact tgcccatcan gggctgggac atgggggtgt gggtaaagac agggatgaag 120
gatagaggct gagagaagaa ggaagaatca gccagcagg tannggcntc tgggaaacct 180
ccagcctcaa gtgtgttggg aacatgaaaa agctttgggg ggtagttgga tctnggtgtc 240
tggtcccatn ctggcagtgg ncattattct tgcctaaga gacactgcct tttcagcagc 300
agatactggg naganggggg 320
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<210> 465

<211> 399

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (79)..(79)

<223> n=unknown

<220>

<221> misc\_feature

<222> (188)..(188)

<223> n=unknown

<220>

<221> misc\_feature

<222> (306)..(362)

<223> n=unknown

<400> 465

taaaatactg aacatagtgg ttaaataact ccagaaagtc caatctctcc agtgagtaac	60
gttaaaacca ttacacatna gcatgggaga atcgcttcca ttagtttagg acagagagat	120
tttgcttttt acagagtaaa tcagtgtctca aatagatact tcctcaaata tgtcctttct	180
acattctnaa cagcccaagt gcaataagat ccttccccct ttccaatcaa gaaaatgcca	240
cttttctact tgctcttctt cccagacat gagtctaagg acccaaagtg ctcactcctt	300
tactgnttgt taagtgtaat gtggggaggc tcagaactgg ggctgacgct actganagca	360
angctaaggg ctggtatctc tctctagcag tcttagaac	399

<210> 466

<211> 445

<212> DNA

<213> homo sapiens

<400> 466	
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aaaactcttt tttggagata tcttccatca agcagtactc gtgccccatat acaatctctt	120
agtggttagg agaaataaat aaaagggccca taatgggttg ttctctttca gacataattt	180
agtaggggac aagaagtctg ttcttcagtg agtacactag agatttactc tggtgactgc	240
cttttgagtt atgggtgaag taagggtacgg ctttaccata accttgattc attcaccctt	300
gattcatttc tcgccccgt cactgattat ttccttgagc atatctctct gcctaact	360
ttagtaggtg ctatagagga tacatggaaa agtatgagat ctggttccat cccagtaaga	420
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<210> 467

<211> 437

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (390) .. (431)

<223> n=unknown



<400> 467  
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 tacatccaca tttaagggtg ttttccaagt tggtttccat aaaaggcctt taacaataat 180  
 aggcttttaa caacaaaaag gtatccctcc catcacaatg agagcttgat gagggtcaa 240  
 aagtgacttc aaaaactgta aataattatt ttccttgat ggctttaaaa acagctactg 300  
 atagcaaata agaaacacta aagaaaaaag acaataagga aacagctgtt tgtctagtga 360  
 atccataata aataccaatt tgaggctatn gnttncaang ccaaaatntt cttatgggaa 420  
 agttaatggt natgttt 437

<210> 468

<211> 392

<212> DNA

<213> homo sapiens

<400> 468  
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 gagtgtgtta gaggtgtttg aggggagggg agacagtatc ttcggggatc ccaagaagct 180  
 gctcacccaa tatttcgtgc aggaaaaacta cctggagtac cggcaggctc ccggcagtga 240  
 tcctgcatgc tatgagttcc tgtggggctc aagggccctc attgaaacca gctatgtgaa 300  
 agtcctgcac catatggtaa agatcagtgg aggacctgc atttcctacc cactcctgca 360  
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<210> 469

<211> 267

<212> DNA

<213> homo sapiens

<400> 469  
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gagtgtgtta gaggtgtttg aggggagggg agacagtatc ttcggggatc ccaagaagct	180
gctcacccaa tatttcgtgc aggaaaacta cctggagtac cggcaggtcc ccggcagtga	240
tcctgcatgc tatgagttcc tgtgggg	267

<210> 470

<211> 516

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (321)..(475)

<223> n=unknown

<400> 470

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tttttcttct gacttccaga agaaaattaa gaatagcaca tgtttcacag ctccactgcc	180
aaggtcttct aaggctacag gccaggaatt acagcagttg accacaagtg gaaaagagtc	240
taagaccaca catccttagg agctccagaa gaagatctag gtccacaaca gacctcaggc	300
ccaagcctta gctctggctg ngcactcctg ggctccccga gacagaagag cttgtngcta	360
nttaaagtct catattgcct gggcagtaac ccagagaaat ggaactcgaa tgttagaatg	420
gggaaaggnc ctgcnggggg gcntatggaa tatctcnatt tgtacttgag agaanggcatt	480
attagtaaca cctccgggca tataccctca gcagct	516

<210> 471

<211> 370

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (351)..(351)

<223> n=unknown

<400> 471

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tggtatacat taaatatcca ggatggagaa gccacatgct actcaccgaa ggaggaaatt 120
atcacagcag cctgggcacg cgttgtgagc tctcctgtga ccggggcctt cgattgattg 180
gaaggaggtc ggtgcaatgc ctgccaagcc gtcgttggtc tggaactgcc tactgcaggc 240
gtaagttgtg tgtgtgcata tgctgatgta tgtatgcgag agaagccagc cagccagctg 300
ctgaggggtat atgcccggag gtgttactaa tatgcccttc tctcaagtac naattgagaa 360
tattccataa 370
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<210> 472

<211> 524

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (315)..(315)

<223> n=unknown

<400> 472

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tttatatctg tgggtattttc ctgttaacta ctcttagtga acacgtgacc atatacctga 180
tatcattaaa aaggaaaatg gcctaaacga aacgttaaaa gtggaggtat ttataaagtc 240
ttctgccaaa gaccattggt taatgatctg taaaatgtag attatcttct tttattatga 300
atgtgattgt aaganacacc ctaacattct ctaacttttg aaaatgaata ttttgtattt 360
ctaaggacca aggaaaatat tttttaagcc aatgtagtac acagaagcct tgtaaatgag 420
aggtacaatg acttggatca actgcataat gctagattag aattccagca tttgatgata 480
aatttatcaa tcttttctat aattcttata ctgcactaaa ttac 524
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<210> 473

<211> 134

<212> DNA

<213> homo sapiens

<400> 473

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gtatatcaca ttcaaatagc attctgtgga ggaagtagaa tggaaaaaaa gttcaaagag 120

aaaaagagaa gatg 134

<210> 474

<211> 119

<212> DNA

<213> homo sapiens

<400> 474

ctctttgaac tttttttcca ttctacttcc tccacagaat gctatttgaa tgtgatatac 60

ctgcatgctt gaaagtcttt caccaatcat tctataattt ttcaatctat agtatgtta 119

<210> 475

<211> 462

<212> DNA

<213> homo sapiens

<220>

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<222> (426)..(426)

<223> n=unknown

<400> 475

ggagtgttag gggtagctgt tggggtgtta tttgtgtagg agtggtgggt gtgtgttggt 60

gttgacgtgt acttaggagc gttgtgtgtg taggagtgtt ggggcatttg tgttggtggt 120

gtgtgtgttag gagtgttggt gtgttgacat atgtgtagga gtgtcagggt tgcataagggt 180

tgtgtacaca cgttcacatg tagctcctct ttgtttaatt ccacaaagct tcaactcccaa	240
actcagtgcc aacttcctct ctccgcactc aggggtcccc ttctcctccc aactgctccc	300
tccctgggcc cctaagaagg gtctgtgacc gtctgcccga gcctttgccc agcgacagga	360
gccagtgcgc aggctccctt tctgccagtc agatcacgct gtgcatctgc agaacggctc	420
caggangctc tgagagcaga gagcaggggc ttctcctctgc tg	462

<210> 476

<211> 513

<212> DNA

<213> homo sapiens

<400> 476	
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ggaagtatgc aagattaagc aagagtgatt tttttttttt ttgacaaat caggtggcct	120
tcctaaacat actaagaatt atgttctttc atgtgtggag acacatttgt ttgcagcact	180
ttaaaaaata tatatggaat aaaagtttac atgttggtccc tctagggatc taattaagga	240
cattaaagta caattcttga gctactaacc atcagctctt cttaatcaaa gattgccatc	300
agtgtagagt gtatctattg gcacaacatt ctggtgtttt gataacagta gaactcaatt	360
tcagtaacta ttaggagcat ggtctgtgcc ctagcattaa aaatgttact tattattatg	420
tgaatatctt gtattattat acaatgcagt attcaaattt gtcctttag tagcagagatg	480
actgataatt tctaaaagat tcgatacctta aaa	513

<210> 477

<211> 509

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (293)..(317)

<223> n=unknown

<220>

<221> misc\_feature

<222> (495)..(495)

<223> n=unknown

<400> 477

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catgcatcaa gaaaacataa ccttggtcct cagggtgaacc cttggaacat tctgtgaccg      120
cctgatgtcc attctgagcc accttggcac acatgcttac aggcagcact gctaagggtt      180
caggtgcccc atggctgaca gcccgagttg cttctgtgga ccatcatgcc gctcggcacg      240
tcctgagaca gaagttgctg caggaaggag cttctggaga ggtcctgtgg cannnnnnnn      300
nnnnnnnnnn nnnnnnttc cttcttgaac agacattcca actttagatg tgtttataga      360
actgaccttt ttactaacia aatacaatga tatatgttgg aaactactta atatgctttt      420
cctgcacacc ttagcaataa ctgtaggggt ctctgctaga gttgtttgta tgtacagcaa      480
ttttgaacia attgntttta atgtaatat      509
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<210> 478

<211> 466

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (332)..(456)

<223> n=unknown

<400> 478

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gtccaaacct ttctgagagt aaaaggggtgc cattagtaat tacatcagga aaacatatcc      60
caggcaaacc aggatatatg gtcagcctac ttgatgcatt atgaaatgcg gtgattgccg      120
agttctgtca ttctcacctc taagatatct ctcatgtcca tatcctcttt tccattctga      180
ctaattaagc ctcaactgct attaccagtg accttctaac tgcttttcct acctttaagc      240
```

tattctcacc cctccatcc ttgtgatgca ttattgcat cgtgatcttc ccgaagcata 300  
gctctgacta tggcccatct cagaaaacct anagtggctc accattgcct gatgggtggag 360  
ttnagagccc ttgagctagc atttcattat ggnccgtnat tttccccgc ancacttten 420  
agggttgtgg accacaattn ggnntggggc ttaagnatgg aatgaa 466

<210> 479

<211> 227

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (40)..(207)

<223> n=unknown

<400> 479  
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actctcatgt gtgctttanc tgggaaganc tnactctngc catgactctn gcctggctgg 120  
nctagctccg ggatggggaa nancaaaggg aaggggagtg acagcctctg gnaggggacc 180  
gcagacgtgg gtggggcatt ctccagnggc atttggcttc ctgcttt 227

<210> 480

<211> 522

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (446)..(504)

<223> n=unknown

<400> 480  
agacactcaa tcccatctgc ctgattttgg ggtgggctcg gtagcaccgc catgcttatt 60

taccatagga ttcccatgc acaaagccac cggcatttgg ctgtggggtg ggaggctaag	120
atgaaacagg acttgagtga cacctggagc aggttaagggc catcaccttt agccttcacc	180
ctgtacttgc catccaggca actcacaggt taatacagag gtgccaggct ctggagcaag	240
cttaattgac aggaaggtgt gggctggatc ctctggaagc tataaataaa agtacctgct	300
tttgaggca caagatgccc tcaccactag ctctgggca aggggaggag aaaaagaggg	360
gagaaagaag agaaggaggt gacatttaga aaaaatgagg ggtgccagga actgtgcttg	420
gaagaaagga ttggaaagca ggagancaaa tgcccctgga gaatgcccc accacgtctg	480
cggccccctt ccagacgctg ncanttcctt tccctttgct ct	522

<210> 481

<211> 515

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (432)..(452)

<223> n=unknown

<400> 481	
aattgtagta actacctaataacatgattg taaggattaa attattttaga acactatttg	60
ttacttgga aatatgcaat cataagctat tttgttggtta ttgttatttt actaccaaag	120
cttattgttt cagagcccct aggtgaccag gcaaaatggc agttccttcc agctggctct	180
cagatgggca catctattag cctctgctct tgtaagaagt tagctgcaga acccacatgt	240
gaatccttgt aggactctgg agaagatcaa atgggagctt agatgtggaa gctctttgga	300
aaccaagaaa cactctgaaa atgaaaaggg tggaagagta aactgttcct gtttctccat	360
cttgacagga agcagaagtt ctcttagct gatttttctt cttgccttat actgggttct	420
ttaacaccag annnnnnnnn nnnnnnnnn nnggaatctt ccagaaattc atgaagagac	480
ttcagggcag gaaagcctga actttctcat ccaac	515

<210> 482



<211> 286

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (279)..(279)

<223> n=unknown

<400> 482

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atacttatac ataaatctag atgcatttgt tcaagtttat ctccagattc aaatcttaga      60
cataagatta ttgggtcaag aggacattag catttaaaat tttaacatac atgttttaaaa    120
atagaaataa aattagaggt tgaaggctctt tgcctctcca tccacagtat atgggaatgc    180
ctgagtctca ttgtatcttt gcagttttgc tcaagtgatg gctgaaaacc agtatttcat    240
ttttatttta ttctgaatgt cacacatttt ttatttcgnc cagatg                    286
```

<210> 483

<211> 237

<212> DNA

<213> homo sapiens

<400> 483

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ctccacaca aagcaggtgg cctcgatctc cgagccctca gatcgttgtg catccgtctt      60
ctgacacaca cacctgccct gggctcttaa ggacttgggt ggactgaggg gtgggagatg    120
ccaactctga ctgaacgatg cctgcagagg aatcaaaggt gccacacacg gcaatcttct    180
ctctgttttc tgcacagcgg actgcccaag cctcgggtca ccagcaacaa ctccaac      237
```

<210> 484

<211> 496

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (8) .. (68)

<223> n=unknown

<220>

<221> misc\_feature

<222> (195) .. (224)

<223> n=unknown

<400> 484

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ttaatggntg aattatttgt gtcacagctc agctttttgg aagacaaact caaacaccta      120
taatttcatt tatatttcta attcacttgg aacctttctg ctttatggta cctagaaaat      180
gataatttgt gtaanccaaa acttctaana tnaatngctt aatncttgaa atatggttatt      240
ggaaaatttt aagcagtgtt taaacaccat taaattatta tgaacttgta attcagaatt      300
gagtaaagaa atattttttc tagtccttca tatattgaaa acttgccaca tgacattgta      360
tcgtcttcat tttccagaag atgcgttggt gtgccatagg gttctaactt ccttgaaaat      420
aggtttttaa gtcaattgta aatatacgta ttattgttaa aaagtaactt taaactgcca      480
cacatagctt tcaaac                                     496
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<210> 485

<211> 466

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (92) .. (158)

<223> n=unknown

<220>

<221> misc\_feature

<222> (272) .. (272)

<223> n=unknown

<220>

<221> misc\_feature

<222> (373) .. (452)

<223> n=unknown

<400> 485

caaacatcac accaaagatg agggtagcga gcaactggct tgagcagaca gaacggggaa 60

gactccactc tgtcccgagg ggccagccgc antacncca gggccaccct gccctgaggt 120

ccttgtgtgg ccgccctggc ttggcagccc tgcccacnct gccccgcaa acaatgggtgt 180

gtgcgttttt acagcccttt ttaggaaccc aatatgggca taaatgtaac acctatagcg 240

ggggcagatt ctctgtatgt tcagttaaca anttatttgt aatgtatttt tttagaaatc 300

ttaaaattgc ctttgcactg aagtattttc atagctgttt atatctcttt tattcattta 360

tttaacatac tgnctaattt taaaaatagg ntttnaaag ctttcatttt taaggttatg 420

gnaattttgg gcactttaac atttagattc tngtgagagt ttgact 466

<210> 486

<211> 378

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (44) .. (70)

<223> n=unknown

<220>

<221> misc\_feature

<222> (321)..(347)

<223> n=unknown

<400> 486

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ctgaagaagc gcattctcaa catcaaccgc tacctgacct acancctcta cancaacgtc      60
tgccgcagcn tctttgagaa gcacaagctg atgtttgcct tctgctgtg tgttcgcac      120
atgatgaacg agggcaaaat caaccagagt gaggggcgat acctcctgtc tgggggctcc      180
atctcgatca tgactgagaa tccggcaccg gactggctgt cagaccgggc ttggcgagac      240
atcctagcac tctcgaaact gccaaccttt tctccttct cttccgattc gtgaagcacc      300
tctcagaatt ccgggtcatc ntcgacancc ttgagcccca ccgggangcc tttgcctggc      360
atctgggacc agtaccta                                     378
```

<210> 487

<211> 258

<212> DNA

<213> homo sapiens

<400> 487

```
tgagtctagt agtccagggc acagatgagg gccacaccac gctttatcca gtgtcgctgg      60
ggctgatggg tggggatctc cacagcaatg acatagttgg tagagtgtcc tgtggttgat      120
agtgttccag cagcagtcag tgtctttag atggggcaca ggtaaaagtc ctggtcctgg      180
gccttgcggt tgggtgttgg caagagccag ataacggcca tctctgtgta cagctccttg      240
ggctgagact cagccagc                                     258
```

<210> 488

<211> 321

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (14) .. (317)

<223> n=unknown

<400> 488

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ggaacctgta ctgnacagac acaggtcgaa ataccatnga ggcgtccang ctggatggtt      60
cctgccgcaa agtactgata aacaatagcc tggntgagcc ccgggccatt gctgttttcc      120
ccaggaaggg gtacctcttc tggacagact ggggccanatt tgccaagatc gaacgggncaa      180
acttngatgg ttctgagcgg aaggtctntca tcaacacaga cctgngttgg cccaatggcc      240
ntaccctgga ctatgatagc cgcagatcta ctgggnggat gngcatctgg accggatcga      300
gagtgtgtaa cctcaantgg g                                     321
```

<210> 489

<211> 102

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (3) .. (97)

<223> n=unknown

<400> 489

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ccnaanatac tgaacataac cggnaaaata ncnccagaaa gtccaatctc nccagntgt      60
aacgnnaaaa ccacnacaca tgagcanggg agaatcnctt cc                          102
```

<210> 490

<211> 416

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (383) .. (393)

<223> n=unknown

<400> 490

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tctgctgagt tcttctttgt gcatgtaaac tagccaggct ttctctgcta gagatggcca      120
tcccaacatg gcttttgctt actccttcta cccagtagac ccacctcttc catatcagga      180
ggagataatc atccattcca tgccgagaga gggtgagtga cagctttggg ctgtccatcc      240
tcctgcctta gtgctcagga ccctggggag aggagcagga agcccgagcc ttgagaagca      300
ggaggaggtg ggggcaggct gtgagctgac acctttcaca cctcgcttct cttttccttt      360
cagttatttt aaaaggaaga gcnacaaatt gtnctttctc atttccccta tctcct      416
```

<210> 491

<211> 425

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (22) .. (412)

<223> n=unknown

<400> 491

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gcaggggtggg gttcccccca tntgaccctn tanggctctg gggtgactcn ttcttnnttg      60
ggntcanang tggagctgat atttgctcct ccngttgagc cctgctnccc ctggnncttg      120
gcgttntcag tgtctccana cactanance acgttctnctn nataattgat gttgaancag      180
ttgacntgtt catccccagg actcaggtaa cancanaggg cagggctctng ccanatgtta      240
cgtngggggac cacacanntc attgatnaag gttaatttct cctnntntgc ncagcaggcn      300
tgttctggaa atggcaggct acagcaccgg gcagtcatgt tgtggatcan cccangaata      360
tgtttatgct tgggtganna ctcttttggt tcncagang tggcccatna angttggggg      420
tgact                                             425
```

<210> 492  
 <211> 384  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (242)..(340)  
 <223> n=unknown

<400> 492  
 gaatggggta aaacttaaga aggtccaaga gcggcagtac aaccctttgc ccattgaata 60  
 tcagctcacc ccttatgaga tgttaatgga tgacattcgc tgcaaaagat acaccttgcg 120  
 aaaagtgatg gtgaatgggtg atattcccc tcggttaaaa aagagtgctc atgaaatcat 180  
 cctcgacttc atcagatcca gacctccttt aaatccagtc tcagccagaa aactgaaacc 240  
 anctccacca cggccacgga gnetccatga aagaatatta gaagaaatta aagcaganag 300  
 aaagctgcgg cctgtatcac cagaggagat tagacgtagn agattagatg tgactacccc 360  
 tgaatctaca aagaatcttg tgga 384

<210> 493  
 <211> 513  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (19)..(71)  
 <223> n=unknown

<220>  
 <221> misc\_feature

<222> (446)..(497)

<223> n=unknown

<400> 493

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tttaaaaagc acattctcnt angnntatat ttatatacat atacaaatac catttccttc      60
ccccttgtnc ncttctgggt agtcatttta aaaactcaag cctgggggtca tcaaaagggg      120
tagatttata ctcccaccta actgtctgga gtatagagtt cagatagtct cttaggaagt      180
\ ttataaatg agattcaccc agtacaattc tgaaagctct taaacaggag tctttaaaat      240
aatgtaaaca cttaagtaat caataagggt tctctgggtg cccactttta catgcaaata      300
cagaccaact gttaacatgc attatttttag tcaactggta aagtttattt cataagtata      360
agtaatttta agccttttac taaactgtaa atttcaatcc attaaaaact actaccggag      420
cagttttgag gtattactgt aatttngtat agaaatgtta ctgtattntg atgtgggtga      480
aatgcagccg tnatgcnttt catgaaacgg tgc      513
```

<210> 494

<211> 441

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (388)..(428)

<223> n=unknown

<400> 494

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gccagggccca gatgggggtcc cacagagcac gtccttggt atcctgctgc ctttgctgct      120
gcttggtggt gcactggcga ctgcactggt cttcagctac tggtggcgga ggaagcagct      180
agttcttctt cccaacctga atgacctggc atcctggac cagactgctg gagccacacc      240
cctgcctatt ctgtactcgg gctctgacta cagaagtggc cttgcactcc ctgccattga      300
tggtctggat tccaccactt gtgtccatgg agcatccttc tccgatagtg aagatgaatc      360
ctgtgtgccca ctgctgcgga aagagtcnat ccagntaagg gactggactc tgcgctcttg      420
```



gctgaggnca aggatgtgct g

441

<210> 495

<211> 441

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (319) .. (395)

<223> n=unknown

<400> 495

gggtcagtgt tgggtgtggtc actgctgagt ccactgtgcc cagaagacag ggtccacagc 60  
aggcactcca taaatacatg ttgcaggact gccctcactg gctcactctg tggagtgagg 120  
gacctaatgg gcccatttta cctattgcct ctgaaagtta aagggcagga acaagggtgga 180  
gggccactgc cctctggcct ggcattggccc agaggcagct tgggggttagc tcaaggcagc 240  
taagcaggtc cagcccaaga actaagtcaa gtgggccgag gaggtcttga gagtggccgg 300  
ggccggcgta cattccctng catgggtgag aactgcccgt gttcttgacg cacattcatc 360  
tcatgcgagg tgctggggcc cnagttcatg taggntgctg gcagctgcac ataatgggtcc 420  
ccaagcagtg cagacactat c 441

<210> 496

<211> 359

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (2) .. (353)

<223> n=unknown

<400> 496  
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 gaaagtcatt acnaattcta tctggaancc agaaaataag gngganccaa agatgacncc 120  
 aaacttgga nactgggnan actggatggt gatgctgttg accanaatag gtaatagaag 180  
 aggagtntca ggttttaact ganagggagg cttaggntgg tganaanaan ttcagcttta 240  
 nacttnttga ntttgaggng cccatgaagt ctaagnggag ctatntaaaa ggcaggngga 300  
 aatgcgaatg tggantttctg gaaaggaatt tgggattnca gtgtaaactt gnnttactt 359

<210> 497

<211> 494

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (31)..(31)

<223> n=unknown

<220>

<221> misc\_feature

<222> (267)..(336)

<223> n=unknown

<220>

<221> misc\_feature

<222> (476)..(476)

<223> n=unknown

<400> 497  
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 gtcaaacata attcctcggt ttggccttcc cacctctata ctgtctgata acagaccagc 120  
 ctttattagt caaatcagcc aagcgttttt tcaggctctt agtattcagt gaaaccttta 180

tatcccttac agtcttcagc cttcaggaaa ggtagaacgg actaatgac ttttaaaaac	240
acacctcacc aagctcagcc accaacntaa aaaagactgg acaatacttt taccactttc	300
ccttctcaga attcaggcct gtccttggaa tgctanaagg tacagcccat ttgagctcct	360
gtatagacgc tcctttttat taggccccag tctcattcca gacaccagac caattggatg	420
tgccccaaaa aacttgatcat cctactatc ttctgtctag tcgtactcta ttcacnattc	480
tcaactactc atac	494

<210> 498

<211> 249

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (19)..(19)

<223> n=unknown

<400> 498	
ttcctgcctt cttatattna taagaaaaat aaaacaaaat agtgtcgaag tggtggggca	60
gcgaaaattt ttggggggcg gtgtggagag agagaatggg cgatgtttct cagggtgct	120
tcgagcggga ttggggggcg cgtgggaacc tagagtggga gagattaagc tgaaggagg	180
tcttgtggtg aggggtatat tgtgcggttg ttagaagaaa cattcgatcat ttagaattat	240
tggtgatga	249

<210> 499

<211> 390

<212> DNA

<213> homo sapiens

<400> 499	
gccttctccg tcctatattat cactaccaag gacaggttac aacaacctca gtttgacttt	60
ggcaagttat aatcatcaga cctcgcagat ctacgagctg gcagccctcc agatcagata	120
atgtacctta tttgttttca agcctgatgc agaaaagaga aagggttaa taagatcctt	180

aaaagagtgt gtttttccaa aaggagccgt caggtgggga gagggcaggg tggccgtggc 240  
 tcctggctgc tggteccaaa ccagtcctt gtgtgggcct ggaaaacttt tttggcctca 300  
 gggccatacc tctttctgct ttccttgat tccattgctt ttgcattcaa caaacaaaag 360  
 ggtctgtgtg agatacttgt taagacatgt 390

<210> 500

<211> 344

<212> DNA

<213> homo sapiens

<400> 500  
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 tttccaggcc cacacaggga ctgggtttgg gaccagcagc caggagccac ggccaccctg 120  
 ccctctcccc acctgacggc tccttttgga aaaacacact cttttaagga tcttattaag 180  
 ccctttcgct gttatgcac aggcttgaaa acaaataagg tacattatct gatctggagg 240  
 gctgccagct gctagatctg cgaggtctga tgattataac ttgccaaagt caaactgagg 300  
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<210> 501

<211> 436

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (13)..(13)

<223> n=unknown

<220>

<221> misc\_feature

<222> (184)..(184)

<223> n=unknown

<220>

<221> misc\_feature

<222> (331)..(406)

<223> n=unknown

<400> 501

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gtggtgactt ccaagagtga ctccgtcgga ggaaaatgac tccccagtcg ctgctgcaga      120
cgacactgtt cctgctgagt ctgctcttcc tgggtccaagg tgcccacggc agggggccaca      180
gggnagactt tcgcttctgc agccagcgga accagacaca caggagcagc ctccactaca      240
aaccacacc agacctgcgc atctccatcg agaactccga agaggccctc acagtccatg      300
cccccttccc tgcagcccac cctgcttccc nmatncttcc ctgaccccag ggggctctac      360
cattctgcc tctactggaa ccgacatgct gggagattac atcttctat ggggaagcgtg      420
acttcttgag agtgac                                     436
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<210> 502

<211> 504

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (454)..(485)

<223> n=unknown

<400> 502

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gtccctatta gctaaaagcc cattaagaca agaaacacag gaagcccctg gtcccagaga      60
agaagcaaag ggccaggtag aggcagaaag ggagtctttg gatcctgtcc aggagcctgg      120
gggccaggca gaggtgatg gagatgttcc agggcccaga ggggaagctg agggccaggc      180
agaggctaaa ggagatgccc ctgggcccag aggggaagct gggggccagg cagaggctga      240
aggagatgcc cccgggcccga gaggggaagc tgggggcccag gcagaggcca gggagaatgg      300
```

agaggaggcc aaggaccttc caggggaaac actggagtct aagaacaccc aaaatgactt 360  
 tgaggtgcac attgttcaag tggagaatga tgagatctag atcttgaaga tacagggtacc 420  
 ccacgaagtc tcagtgccag aacataagcc ctgnagtggg caggggaatg tacctgggac 480  
 aaggncattc tgtgcccctg ctgt 504

<210> 503

<211> 531

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (4) .. (32)

<223> n=unknown

<220>

<221> misc\_feature

<222> (311) .. (449)

<223> n=unknown

<400> 503

actnacgntc tccctnnccn gcacaganag nnctgatacc tactgggacc aggcaggggg 60  
 cacagagatg gtccttgtcc cagcgtacat ttcccctgcc cacttcaggg cttatgttct 120  
 ggcaactgaga cttcgtgggg tacctgtatc ttcaagatct agatctcatc attctccact 180  
 tgaacaatgt gcacctcaaa gtcatttttg gtgttcttag actccagtgt ttcccctgga 240  
 agttccttgg cctcctctcc attctccctg gcctctgcct ggccccccagc ttcccctctg 300  
 ggccccgggg natctccttc agnctctgcc tggcacncag cttcccctct ggcccnaggg 360  
 gcctctcctt tagcctctgc ctggcctcag cttcccctct gggcnntngn anatctnate 420  
 agcttgntctg gccccagnt cctggacang attcaaagat tccttctggc ctctaactgg 480  
 ccctttgctt cttctctggg aacaagggtt ttctgtgttc tgtcttaatg g 531

<210> 504

<211> 387

<212> DNA

<213> homo sapiens

<400> 504

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gggatttgcc cccatgatct acgcagctcc tgccaagccc cacctcatta catttccaca      60
tgagatgtga gtgtggacaa atgtttaaac tataaggata aaaagcaaga tctttaggag      120
ataagcatag agatttagga gattagccta cctgtcatgt tcaagtttct atgtaggact      180
catatgatat agacccttgg gccaaacttta ccctgttgca tgccccgtct ctcacatgcc      240
ttcgagtga c tggtatgtag tgatgatttt atcagtgagg atcctggtag taataggtgg      300
atTTTTTTTT tctTTTTTgaa gatagtttat tgaagggact gttttcagag gtgtgaccat      360
ggtttaagat aaccaagaaa ggatgat                                          387
```

<210> 505

<211> 303

<212> DNA

<213> homo sapiens

<400> 505

```
gtgggtggtt ctagcaagtt tttatgtaca tttattatgg ctgctacgtt tttagatcta      60
catgtatctg gttgatgtaa aatcatgact ctccatgac ctgttctaata ctaagcttgc      120
cagcagatgg gcttacacct aaaataagac cagcttctcg cctactcatt ttctgttcaa      180
atcctccttt atagtaggat gaaaagctag gagttgaaat cttctttgca gtttctgtga      240
taacttggtc tagagggttc cagatccgaa atgcgtagga cctgcaaata caagagctgc      300
aac                                          303
```

<210> 506

<211> 504

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (49)..(49)

<223> n=unknown

<220>

<221> misc\_feature

<222> (266)..(424)

<223> n=unknown

<400> 506

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aaaaaaca aaa acaaaacaaa aaagtgttat ttataggaat aagaactana atgccttggt 60
aatatattgt tttggcattg ccaaatttag cctatttgag tgcattggatt gcatttgggg 120
attgctgttt tcttttttgt tttgtatgtt tgcttttagat gcgtagacag agggagtgga 180
gtaaggcttt acagagatta ctacagaagg catttttttt ttccataaag aggggaaaac 240
gcacccatct cataacaaga atttgngtc naaacgagac annnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnttt cncatcagca 360
gaatgaaagc gttggcctan agacacccat ttaaattccn cctccaaata ctcatcggt 420
cganattttc tcagtgtcta ctaagcacia tcattgttaa taaacactat gattcttgga 480
gagctccaaa tcgtgtctct gctt 504
```

<210> 507

<211> 557

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (428)..(428)

<223> n=unknown

<400> 507



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aaaacggcct atccacgccc agcttttccc tttgggtggct tctccaggcc cagaaattcc      60
tcagttcggc ttcgcaaggt gaagttgctg cctccctgtg ctttctccag gccagttct      120
tcctcccagc tgggtctaca gtcccatctc ctgactcaaa acaacctatt ttggctcggc      180
tcctgcccag cacctggcgg cctttgtagg cctaaagctt cctcaagtca agcgttccag      240
gccagatca tgctgccagc gggccttcac aggccagct actgcctgac gatggcttcc      300
ccaggcccag gtccttgctt tccccagcc tcccaggcc cagcccttgc ctcacagttg      360
ctttcccagt ccacgttaca gcctgttacc cgacggcctt gacagaccaa actcttcctt      420
cacactgncc agtttaggac aagctcatac gtcttcagc ctctccaggt caagcttcct      480
gcctcacact ggcctctata ggccagggtg tgaatcgcaa tggctgtgtt aagtcacctc      540
atgcctttct caaactc                                     557

```

<210> 508

<211> 409

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (113)..(150)

<223> n=unknown

<220>

<221> misc\_feature

<222> (151)..(405)

<223> n=unknown

<400> 508

```

tccatcatga taaagagttc aattctctgt gaaaacataa tcataaatgt atatatgaac      60
ctacctaaca agagctcatc aaaatatgtg aaacaaaaat tgatagaact gcnnnnnnnn      120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnncaaggt      300

```

cacatagaat cttcatcgag atgtaaaaca atcttgagca taagaccact ttaaccaa 360  
 taanaaataa caggaattat atanattata ttctcagact ataanataa 409

<210> 509

<211> 543

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (446)..(446)

<223> n=unknown

<400> 509

caaacaaaca aaaaaactct atcacattgt acctcaaaaa tacatgcaat tattatttgc 60  
 caattaatga aaaacaaaac ttttgaaaag gaaagtcacc ttaaatcaat taggtgaatc 120  
 agggatgacc tcttagaaga tgtataccta cactgagcca tcaatgctga ttaggaattt 180  
 ggcaggtaaa gagagggtgga gaaaggaaaa aacaaaaaga aatggcacat gtgaagaatg 240  
 gcctattcaa ggaaaagaaa ttgattatgg gtggtgtagg gggacagata ggacaactag 300  
 gaaagactag agaggcagcc atctgcagag catacagtgc catccaggcc atgtaaaaag 360  
 tagagcttta ctactaagaa cacttgggaa gctattgaag aaatataggt aggggagtaa 420  
 cgtgataaat ttgcatttta gaaagnttat ttaggttgta gaatgaagag tgggttgag 480  
 gggttaagaa tttgaataga gaaattagtg aaaaaatgtt gtaaccccaa ggaagggtga 540  
 tgt 543

<210> 510

<211> 533

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (257)..(510)

<223> n=unknown

<400> 510

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tatttctaca aacctatgga tatactatca atatatgaat atttgctgca gttttgtgta      120
taataattaa aatgtaatct aaaggccatc attcaggact ggttaaataa agatacatcc      180
atgtatcatt atacagtggg gcaggagata aaaatacaat caatctttgt gtttttaagg      240
gcaccagata ttttttnna gtaggtagan aatgggtcag gnaanntccc ttttctgnac      300
nttcnaaagg angaatacag aatatgcanc ngtnnttgnt tnggatactt nagatgactc      360
tattgctagn ggtattttgt agtattaggg aggaatgcac agtgaggaaa gttacttttt      420
attccatana attaattctat actatactat ttgaacatat gcatgtcagt aagggttgca      480
ttgtctttnt acttttatgc actgaanach atagttgtta tttcaaaaat ata      533
```

<210> 511

<211> 544

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (140)..(356)

<223> n=unknown

<220>

<221> misc\_feature

<222> (514)..(514)

<223> n=unknown

<400> 511

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gcctgggtctg tggctctctcc tagtcattta taaaacatga atgataaaga aaaacagcct      60
```

ataatctaaa agacaaaatt acaaacatgc tatgtgaccc agtttctagg acttaacttc	120
cctcttgaca taataaattn nnnnnnnnnn nnnnnnnnnn nnnaagacag gatcttgctc	180
tgttgcccaa gttgacctaa taaatttcaa gagtcctaaa attttctttt ttaagacaac	240
atatcactgt gctccatgat tgatagtggg gctccgtggt ttctgccagn nnnnnnnnnn	300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnngctg	360
ttcccaaagtg acctttcacc cagtgaacta gcatttaatg aggaatcttg cctgaatccc	420
ttatttcttg ggacaaagtg ttaattttct aattttatca ttccctcaac atttattaat	480
aaattattta ttagcaagca ttcttctgga gggntttcct ctttgattta ttttttatca	540
gtat	544

<210> 512

<211> 457

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (89)..(89)

<223> n=unknown

<220>

<221> misc\_feature

<222> (93)..(452)

<223> n=unknown

<400> 512

gcaaggtggc ggccatctgt ctgaggctgg gaatctgtct ccagccaagg ccagagacag	60
gcacgtccaa ggaggagggg ttggggcang agngctatgc tgaagggatt ggctnnacat	120
anatattcaa caggtaanag gnggagctat gnatattcat taaggtgggc ctgacacatg	180
ccctcttatt gagcanagca tgtaatatat gacccatgtt cactttgggg tggagactta	240
acatttacac atcttacaat tagggccttt atggcanaac gtcttttcag gacanaaagg	300
catgcangtg catcatctct ctctaataac gggtcagctg gncggcatgg tcagctggnc	360

nnngnctct nattananna atgtcnctgt aatnagtntc tngtcnaatn ncagctgcta 420  
 tggctggtga nncagantca gttagttgnc anctagt 457

<210> 513

<211> 535

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (197)..(197)

<223> n=unknown

<400> 513

gtcccactcg aacatctcca ttcactgtcc acttttgtgt ttcacagttg ggattacaac 60  
 tgtggttcat gaagcgagaa taatttcctt ttgggccggc atcaattata cggctccttca 120  
 gaaagaaaag aaaagtaöct ttacataaa ttaagtctct cccagaaaca tccaactcag 180  
 tcaaggatca caggcancag cattttgcta ccaactggtg ttgacaact gacagatcag 240  
 gaaatgtgag gctgcctggg taatttacta agttctctcc tttatttgat gaccttcaag 300  
 tcaaagtaat taggataaag tgggatttag ttgcttttta agtttgcttc tagaaacaaa 360  
 tagaccatgg aataatgcta tttagaagat tagtgggcca gaggtttagg aatggtatTT 420  
 tctgattaga gatctcaaag ttctgataac tgctctgttg ttttgcTgtc agccttccctt 480  
 ttccgctcca agcaggaagc aaaactagta taggaggggg tacatgagag cttag 535

<210> 514

<211> 112

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (24)..(110)

<223> n=unknown

<400> 514

aagattggta agtccttata gagnntattg acctagattg aatgagcagt gcttttnagg 60

tnnnaagggt aatgattatg taattatana cacaanatgt tgnatgtncn at 112

<210> 515

<211> 485

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (271)..(468)

<223> n=unknown

<400> 515

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ccagcccttt tttgccattc cttcctactc tggtcagtag gaggcaaagc agagggctca 120

gcaaaagccc cacaagctca ttcttctaag gcaggcgtga tcaaggctgc ctgattgtca 180

ctgccaaactt ctgtgaccaa ggtagacctc ttctttctcc tgcaggagac tgcagtccgg 240

gcaggggagc tggaccaggc tctaggacgg ncttcaccc taagcatcag taaccagta 300

tggggatgat gaggtgacac acaccttcag acagaaagtc ggaagcact gcagagctgg 360

atggangctc tgtggcagct tttctttgac atgagtaaga gagaaggggg ctgggttgaa 420

cctttinggaa agaactggag tttgtcattt ttactaaaag gcctctgntt caaagattat 480

gtgga 485

<210> 516

<211> 295

<212> DNA

<213> homo sapiens

<400> 516  
 gggaggtatg tttgctccaa gggttcttca gtgccatcct caaagctggg tagtgcaggg 60  
 aggtagggca gagttgggtc cagttttctt ccaggaaggg tttagggagg tcccagcgag 120  
 ccccaggaat gāgtccctcg gtaccatggc aaccacaatt taagaggggc ttctgcccac 180  
 ccctgcagcc taccacaggt ccagcagagg aacaggaggg cagactggcc aacttgctat 240  
 aaacagcgcc gtatccagag cccaactgcg catgggtcat tttctcttct gggca 295

<210> 517

<211> 449

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (442)..(442)

<223> n=unknown

<400> 517  
 atcacattgt acagtgtggg acatctgaga agcagagagc ttataacata tacttggcaa 60  
 taagtcacaa aaacattcgt attttttaat aacatttttg aaggagaaaa atctgttttt 120  
 caataaattc tggcgtgggt tccctccaga ttttatttct catttaaaat gaccttgggg 180  
 tcgattcttt tcttcttctg ttcggtggct ctttacgagg tctttgcctt aaacagatac 240  
 attttagaga tggattaataa aggggactag ctcagagca tagaattccc gatttccttc 300  
 tgtttccact tctgatgagt tgtggcagca ttaacaccaa tgtaacttaa ttttacagaa 360  
 atttttgtag tcggtgctac tcataatcag gtaaaattat cttcaacaca tttctttggt 420  
 accgtaatat atttggcttt cnttgtgga 449

<210> 518

<211> 430

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (12)..(418)

<223> n=unknown

<400> 518

aataataggg gnaactatgt aatgtataat aaattcagag ttttaccaat aaaaatagtg	60
gcaacctacc actttangag aaagattctg caatttacac aatnatgtat agaaataaaa	120
tagtccacaa agaaaagcca aatatattac ggtaacaaag naatgtgttg aagaataatt	180
ttacctgatt atgagtagca ccgactacaa aaatttctgt atcattaagt tacattgggtg	240
ttaatgctgc cacaactcat cagaagtggg aacagaagga aatcggaat tctatgctca	300
tgagctagtc cccttttttaa tccatctcta aaatgtatct gtttaaggcn aagacctcgt	360
aaagagccaa cgaacagaag aagaaaagaa tcgaccccaa ggtcatttta aatgagnnat	420
aaaatctgga	430

<210> 519

<211> 372

<212> DNA

<213> homo sapiens

<400> 519

ctgaaatatg tcaggttgaa tcaataatag agcacaccag aactcttggc tccatttcaa	60
cctaaactat tcagttctca tcaccccaga ggaaattccg cctctgtgct ggtcagtaat	120
ccccctggat tataaaagtt taactaactc actgtgcaca aggcacggcc attgccaaca	180
ttctcttgca aggtattttc ccaagccctt acccaattct gtttccatga ttgtgacatt	240
ggggattaat tctgcaagac agaactgttt atattctgta ccttaaaaac acatgcaaac	300
atctcttgct taagattctg gcttcctatg gccagagtc ctagaagtgt ttgatatttg	360
tagcagaatt tc	372

<210> 520

<211> 478



<212> DNA

<213> homo sapiens

<400> 520

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cctgacctgc tggacactgt taattgggat gaggtcaaag aaggcatagt taccacattt      60
gcaggagacc ctaacctgga aatagtaa atacataacat tctttcaagt gtctcctctt      120
ttaaaaaagt attttgatat agtttcacac agagaaaact tgcaagaact cttgtatatc      180
ctttaccagc attctccaac tgtcaatact ttgtccatt tactatttgc tttagacatt      240
ttgagatttg tttttgaacc atttgaggaa aacatcctac ctttctaccc ataagtactt      300
tttcagtgtg tacatcttaa gaatcaggac tttctcttcc ataaccacag tccatcagat      360
gcaggaaata agacaataat gcaatactat gacttagccc acagttcatg ttcaaactct      420
accgatcacc atgcctcttt ggtcttgctt aatctgaaac agtcagattt tattggac      478
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<210> 521

<211> 252

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (10)..(246)

<223> n=unknown

<400> 521

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attagaagan acgntaatcn ngcaaaatca ccattttgca accatcttgg taattgattc      60
agcaanaatc atcaattgag gctgaaacta gtaggtgaaa gnttgatnag gaacaggata      120
cttagtttca aagtatccct ccagaaatta cttattanaa ggaaaaacag tatcttcaca      180
atgcggaaaa cacnacctta actgnnaaaa gttancagca gcanggaaag ngcagtccca      240
catcnngggc cc                                                                252
```

<210> 522

<211> 347

<212> DNA

<213> homo sapiens

<400> 522

```
acgagctctg ctttctccgc gccaatgaat gcaagaccgg cttctgccat ttgtacaaag      60
tcaccgccgt tttaaaatcc cagggtacg attggagtga gcccttcagc cccggggaag      120
gtgagcagag cctgacgaat gctgtcgact catcgcgta gtcacgtgtg gttcaatatg      180
ctgtttgttc attggtcggc cccccactc agccagcaca ccctgcggga gaaggaacag      240
ggatcggcag gaagccagcc ttccccagtg actgcatgat ctggcagggc ttagagcacc      300
caactgttgg cttattcagg cagcagattt actgagcact cccctgt      347
```

<210> 523

<211> 320

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (23)..(312)

<223> n=unknown

<400> 523

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tgaagccagt gcttaaaaaa aanaactcta atcaaattta cccccactat ataatattta      60
ccattatacc aaccanactt atacaataat tactcttgaa aaataagtag actgtaatat      120
ctaatacaatt gcaaaatata atagattgca accaatttgt tancaacaag aaaaaaaact      180
cccctaaaga gcttgaacct tcataataat ttanagaatt ctgnntaact taatatacaa      240
gaaaatctgc tgtggataag gnattgcntt atgnncccn nntctatcct cagagaanaa      300
ggcaccaatc nntaacatta      320
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<210> 524

<211> 495

<212> DNA

<213> homo sapiens

<400> 524

```
acatggagat gtgtacatgc gtgattgaca aagctacaga gcaagagaga ggataatagt      60
ggtaatgaga aggatgagct cttggatgac ttctagtttt ctgggttcca tgctaagggtg    120
gatagtgact tccatttata aattagggaa tataggaaga tgcacgtttg ggaacaaaag      180
atgagatggt tggtttttga atggttgaat ttgaggtacc tgtggaacca tatggaaatg     240
cctgctaggt agttggatat accagtccag agtcagagaa gttgggactg gagagagatt      300
tgaggagtcag cagtatagta gtatatacgt tgtagttgaa gtgatggttt gggtcagcta     360
agaggcatgt tgagactgaa gagctgcagg ctgaggagag gacttagaga aactggtag       420
ttaaagggtg gactggtgga agtggagccc cagaagaaat ctgaggaggc ctaaagatag      480
atggaaaact agtaa                                     495
```

<210> 525

<211> 401

<212> DNA

<213> homo sapiens

<400> 525

```
tagtattggg attacgggag tgagcactgc gccaggctt tactagtttt ccatctatct      60
ttaggcctcc tcagatttct tctggggctc cacttcacc agtcacacct ttaactacca     120
gtgttcteta agtctctccc tcagcctgca gctcttcagt ctcaacatgc ctcttagctg     180
acccaaacca tcaattcaac tacaacgtat atactactat actgctgact cccaaatctc     240
tctccagtcc caatttctct gactctggac tggatatatc aactacctag caggcatttc     300
catatgggtc cacagggtacc tcaaattcaa ccattcaaaa accaaacatc tcattctttg     360
ttcccaaaac gtgcatcttc ctaaattccc taatttataa a                          401
```

<210> 526

<211> 511

<212> DNA

<213> homo sapiens

<400> 526

```

aaaaaacctc taagatatta tcttccactt ggagaagagc aacatgcatt aaaaaaatga      60
cagttctctg gtgaagaaac aaaaagggtga taaaatatgt aacaagtaca gagtttagcat    120
ggtggtgagg gcagtagcgg ggaggtaaat attccaggga gaaaaccttg aaggcagatc     180
atcaggatgg cgtttcaggt ggtcatgact gcttttgcag aagcagcatg ttgtgcttga     240
ggagtgggat gaaatgctgt ctagatgact atggagtggg aggcagtaag ctggggaggg      300
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agcctgtaca ccacattctc aacttggtta atccttcagc tgcaattatc actctctggc     420
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<211> 574

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<223> n=unknown

<400> 527

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cccaagccaa acccagcgaa atacagtgat agggctaaaa tggaatcact ccagggatcc     180
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agcgaggagg acttctgcta ttggggaagg cttctcatca ataagcattt aatggaggcc     360

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<211> 480

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<222> (467)..(467)

<223> n=unknown

<400> 528

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 cagtcccca ttcacactag ctctttcaga tggagtgtgt gaattagttg tttgggtgcc 420  
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<210> 529

<211> 65

<212> DNA

<213> homo sapiens

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<211> 536

<212> DNA

<213> homo sapiens

<400> 530

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gcgcttcagg gtgctccatc agagccagcg ggatggctac aacacagccg acattgaata 180

cattgaagac caaaaggtaa ggggtggccag tgccaagaat cccaaagcca ggctatcctt 240

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aggaaatggt atcctagatc aaccctgggg ctcatcagc ttgggagtta agtctctgcc 480

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<210> 532

<211> 167

<212> DNA

<213> homo sapiens

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<211> 469

<212> DNA

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<223> n=unknown

<400> 534

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cctcccccat gtcttatccg tagacttgac cacatcgtga tgacgggtgaa gagcatcaaa 180

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cctttggagg aaatgatcca gcacctcaag gcttgtgatg tccctattga ngaggggcca 420

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<222> (20)..(24)

<223> n=unknown



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 aaggagaggg cgacatcaag ggggacagaa tggaggaggt ccagcctcca tcacgaggag 180  
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<210> 536

<211> 555

<212> DNA

<213> homo sapiens

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tgagagaacag ctggtcgcca cctctctctg gccaacctt catatacttg aaaacnatca      420
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<212> DNA

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<212> DNA

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aggcaaaggt agagcaactg gatctctggc tctccacata gcttctgata tcagacctta      360
ctaaaatgct ttctgggccc aaggacaaag ctcacatgaa caaatgattt tgagtcatga      420
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<210> 542

<211> 429

<212> DNA

<213> homo sapiens

<400> 542

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<211> 461

<212> DNA

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tgggaaatgc tgcttgtctt gaaatacaga attttgatag atcttttcca cttggcctaa      180
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tggcaaaata cttttcagat tcattcattc agaaagtgtg gaatactgta tctgttaggt      420
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<400> 545

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<212> DNA

<213> homo sapiens

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<223> n=unknown

<220>

<221> misc\_feature

<222> (357)..(381)

<223> n=unknown

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ggtgtggtaa aggagcagcc ccattccacag gttctattaa ttccagcctg tgagaattgg	300
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<212> DNA

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<223> n=unknown

<400> 547

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<212> DNA

<213> homo sapiens

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<400> 549

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ggg 123

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<211> 106

<212> DNA

<213> homo sapiens

<400> 550

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<210> 551

<211> 383

<212> DNA

<213> homo sapiens

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<223> n=unknown

<400> 551

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<210> 553

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<223> n=unknown

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<222> (404)..(431)

<223> n=unknown

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<212> DNA

<213> homo sapiens

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<222> (212)..(234)

<223> n=unknown

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tccacgcaaa acaacgcca tgacacacca gnnnnnnnnnn nnnnnnnnnn nnnnacgcct	240
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<212> DNA

<213> homo sapiens

<400> 555

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<221> misc\_feature

<222> (25) .. (77)

<223> n=unknown

<400> 556	
actgaaaccc agcaaggtga ttctnanggc ctttccatgg ncttcnngnc nggtgcttgc	60
tgagatcctg tctctntcc ccagaggaat gctctctggt acaccagatt gactatgaga	120
tcccatggcc atggatcgca cagaccaca ccaggcagtg tgtgcctcag aggaacgccc	180
tctaacattt ccttcggggc tgtggcttct gg	212

<210> 557

<211> 519

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (114)..(352)

<223> n=unknown

<400> 557

```
gccctagatt atcgtggtgg cccagcgtga tctcagggtc cttagagggtg aaaaacagag      60
gccggagtgt cagggtcaga gtggtgccac gtgagcagga cttgagcagc cacnnnnnnnn      120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nngtaaacc      360
tgtgccttgt gttattatcc ccctttacag atgctgccac tgaggtcaca gagttagtaa      420
ccaaggcag agccagtacg tggcagggtt gggttttaaat tgagtcaggc tggctctggg      480
ctgctgatta catttccctt ttcactttgg ccactagga      519
```

<210> 558

<211> 576

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (71)..(71)

<223> n=unknown

<400> 558

```
aggcagggca gagttcattg gggatgccca agccggatgc acccaccctt ccagctccag      60
cctaggcgca ntgcggcttt cgagaggcga aactgtcttc cttgtcctgg tgtcccagca      120
gggtcactgg gaggcaacag tgtggtctca ggggtgctggg cgggcccgtg agggccatcg      180
ccgtccccct aggcattcctg ttcattctgt agcagggcag ggggtgccgc agcctcctcg      240
gttgteccaa ccctgctcct ctctccctc tccttcctct cgtagatgga gtgaagcttg      300
ttgattaaga agattttgtc ctcaccctcc tagaaaggcc agaacacaaa ggggaggaga      360
aatcatccat cagcccatcc agagccatcc tgttccaaac tgcatttgag ggaaaactca      420
```

cgaggtgtat tcaacatcgc aagcagcaaa aacataaaaag aaaaggtgaa agggccacca 480  
aacaaggaca aggaaaaacc aagagccagg aagtgggct atgtgtggat ctaagcttcc 540  
tagtggccaa agtgaaaaag ggaaatgtaa ttcagc 576

<210> 559

<211> 496

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (323)..(393)

<223> n=unknown

<400> 559

ggagccagag atctcactgc acgttcctcc caggaaaaag aagaactttt tgaatgccaa 60  
aaaggccatg agggccttgg gcatggacta gcccaaggga aagacctgcg ggagcatctg 120  
aagagagaag ggatgatattt ctctgcccgc cgggtgtttg tgtgtttata atgcacaact 180  
cgcaaatata aattgcacat gcagaaggca cagaccccgt agcgcatgcc aacttgcagg 240  
gactcggttt aatcttgtct catgaatttc cagatggccc actctcttcc atatcacaag 300  
gacataaaca ctcttctttt canccccacc tccccagggc cctggaggag acccccaccc 360  
tgcaatccac accccatcct ctgctgcaga agctatggtc tgtgtggtga cagccagatt 420  
ctctactctt atgttttgta tttgttacat attctatttt tataaaggga atttaaaaaa 480  
ataaatgtgt tttgca 496

<210> 560

<211> 456

<212> DNA

<213> homo sapiens

<400> 560

tatgtaacaa atacaaaaca taagagtaga gaatctggct gtcaccacac agaccatagc 60  
ttctgcagca gaggatgggg tgtggattgc aggggtggggg tctcctccag ggccctgggg 120

aggtggggct gaaagaagga gtgtttatgt ccttgtgata tggaagagag tgggccatct	180
ggaaattcat gagacaagat taaaccgagt ccttgcaagt tggcatgcgc tacgggggtct	240
gtgccttctg catgtgcaat ttatatattgc gagttgtgca ttataaacac acaaacaccg	300
gcgggcagga gaaaatcatt ccttctctct tcagatgctc ccgcagtctt tcccttgggc	360
tagtccatgc ccaaggccct catggccttt ttggcattca aaaagttctt ctttttctctg	420
ggaggaacgt gcagtgcgat ctctggctcc ctgcag	456

<210> 561

<211> 499

<212> DNA

<213> homo sapiens

<400> 561	
gaccccttcc caatcattag ggagcccagg aagagagggc tgggcctcaa acaaagcctg	60
tggtgcctca ggtgagacct cctagccctc tgtcattcca tctggctaga gaaaagtggg	120
tggactgcag actactcagt caactagaaa cgtcacagat atggccaggc aagcatcaag	180
gagtttccca tcctatgtta gggcacatgg aatatttgca cagatagcc taagcatata	240
cgagatgaaa aaaatgtaga acaattatat aaacataact atagctatgg gtggctgcat	300
agatgggcag atgggctggg agagaacaag aaagaagagg aatatagcac gcaaaagata	360
aaagatccca atatagatga aatcacactt catgggagag aagggaattc cttacaattg	420
tttcattcgg tagaacaaat gaatgagaaa catgaattca ataaacaaag caagatggta	480
ataaaaagcc aagtgcgat	499

<210> 562

<211> 457

<212> DNA

<213> homo sapiens

<400> 562	
gtttctcatt catttgttct accgaatgaa acaattgtaa ggaattccct tctctcccat	60
gaagtgtgat ttcatttata ttgggatctt ttatcttttg cgtgctatat tctcttctt	120
tcttgttctc taccagccca tctgcccatt tatgcagcca cccatagcta tagttatgtt	180

tatataattg ttctacattt ttttcatctc gtatatgctt aggcgtatct gtgcaaatat	240
tccatgtgcc ctaacatagg atgggaaact ccttgatgct tgccctggcca tatctgtgac	300
gtttctagtt gactgagtag tctgcagtcc acccactttt ctctagccag atggaatgac	360
agagggctag gaggtctcac ctgaggcacc acaggctttg tttgaggccc agccctctct	420
tcctgggctc cctaattgatt gggaaggggt cctcgag	457

<210> 563

<211> 419

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (393)..(417)

<223> n=unknown

<400> 563	
gggaacttct atcacatcta cagtagataa caaatgtagg ttgtttggac agacttaaga	60
gactgcaata acaagagttt tttctagctt atcatgtcac atctagcctt ctttgggggtg	120
tggttattat agtttttgag aaatgatttg acccatggta catctgaatt cttataggag	180
acaactatag taactacgtt ttagagtgca agttcttaat gtgttgatat tttaatagtt	240
gccaaactaa actctgtatg cgtttaccta tttaattgtc actggcacc ccaatcaatt	300
acctcagtgt cgcacagctt tatttacaac aaaaatggga tgaggagtgg attattgctc	360
caagatactg aaggaccatg agaaggtata tcnagagagg gacattattt cccacacnaa	419

<210> 564

<211> 318

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (252) .. (252)

<223> n=unknown

<400> 564

```
ccgggggtgtg gtgcctttcc ttatttgtgc tagaagagga ggaggagggt tcacagatgc 60
ataggaaagg cctgtctcct gtgccttttt aactgcccct gctctgggca gagctcttca 120
gtcactcctg cccacctggc gcacgtggga agtcctggat gggagttaat gcagtgggct 180
tcagaactgc agttctgggt ggcggtggg tggatgggtt cactgtcacg ctctgtgtgc 240
actgcccct angcaaaact cacatcagac tcttgtttcc ttttgtaaaa aagttagggtg 300
tgttctgaga cactgaca 318
```

<210> 565

<211> 391

<212> DNA

<213> homo sapiens

<400> 565

```
ctgataagaa tactcacttt atcccagaga tcttcaaact cttcttgtcc aaaagaccca 60
tagactgccc aaaaaaagg aaggctgcag ttgagtcaaa tcatgtcagt gtctcagaaa 120
cacacctaac tttttacaaa aggaaacaag agtctgatgt gagtttgcct agggggcagt 180
gcacacagag cgtgacagtg aacccatcca cccaccgcc acccagaact gcagttctga 240
agcccactgc attaaactcc atccaggact tcccacggct gcgccagggtg ggcaggagtg 300
actgaagagc tctgcccaga gcaggggcag ttaaaaaggc acaggagaca ggcctttcct 360
atgcatctgt gaaacctcct cttctcttct a 391
```

<210> 566

<211> 528

<212> DNA

<213> homo sapiens

<400> 566

```
gctcctgggc tctgccgagg gttaggtaaa gaacaggact caggagctc aacgtcagac 60
ctgtaacctc ttctctctgg tgataaccag aggcctctta gtcagagatt ccttctgatt 120
```



```

aaaggctcgt tatcactcag atgacagccc agctctgttt ggtcatttcg ctcagtgatt      180
tgtgctcctg ctccctttctc ggtgatgggt ctgagccctg agctccagca gtgcattgtg      240
ggtaattttg cttccaggta cacaatgacc aaatcctcag ctgtcctctt catcttgatc      300
ttctctctga tcttcaagct ggaggagctg gtgaggcccc agcgtctctt gtgtccttcc      360
tgccccaca gatgctaaga ataaagtggg agtctgagca gtggcttgtc ctgctgtgtg      420
acagaggaga caagcccagt ccagggtggca gtagatccct ttctgagaag ggacctagac      480
atgggcaata ctcagaatat ttagaaacca gtgtggcagg gtaatgac                      528

```

<210> 567

<211> 480

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (250)..(250)

<223> n=unknown

<220>

<221> misc\_feature

<222> (364)..(364)

<223> n=unknown

<400> 567

```

catgcatgta gtttatatta tgtgcggaat aaacagaatt caatacgata ttttcttaca      60
attcttattt gacatgaata agagcttttg aaaatactag acagaaacag gtccagaatt      120
tggggatgtt tagaccttg aaaatacatg aaaatgttga gatatatagt tctgtatgtg      180
tatatgaaga tgtagatgcg catatacaca catacatagc tgtatatgtg tgagtgtgtg      240
tatatataan attaaaagggt gaatgaggta aatatatgaa ggggaaattc agccttgaac      300
ttcccttggg tcacagagat ggatcctctg agctgtgggg tgttagttag tgtgtatgcg      360
taanatgtct gcatctgcct ggtctgtctg ggtcagagta tgtccatgaa ctttacgagc      420
gttcagttca ataccactca gtgcagaatc cgcgttctctg ttttacagcc cagcagccgc      480

```

<210> 568

<211> 577

<212> DNA

<213> homo sapiens

<400> 568

```
gcaaaagcaa acagtttctg atatacatgc catactgcaa agctgtaaac ccgtgttgca      60
tggtgatgtg acaagcacca catttctgga gggatttttt tttctctect acaagctccc      120
cctccccaaag ccgtggctat aattatttca caaaatgcag ttgccattt ctagagacaa      180
acacttcctt ctccctcacc aaaacttcaa gttcaggcca aatattgaat gaaattagaa      240
cttgagaggc aggccttctg ttagcatgtg tgtttctgct aagagttgcc ccctaccag      300
gctccacccc agtggctcga ctgaagtgtg catgttatgt tttaacagat gggccggctg      360
gcggtctgtg ggctgtaaaa caggaacgcg gattctgcac tgagtggat tgaactgaac      420
gctcgtaaag ttcattggaca tactctgacc cagacagacc aggcagatgc agacatgctt      480
acgcatacac actcactaac accccacagc tcagaggatc catctctgtg acccaaggga      540
agttcaaggc tgaatttccc cttcatatat ttacctc                                577
```

<210> 569

<211> 259

<212> DNA

<213> homo sapiens

<400> 569

```
gggattacca tgtggatata tgtaagaaga gtgttaatag gcagatgaaa cagctagtgc      60
aaagctccta agctggatgc atgcttggtg tgtttgagaa acagcaaaga ggccattgtg      120
actggagtag agtgagcagg gggaagagtg ctgggaaatg aagtcagaga gagaatgggtg      180
acctgatact gtaggggtat gggtgccatt gtagggactt tgaaatggca agcagaacag      240
aggggtgaca tgaagtgac                                                    259
```

<210> 570

<211> 544

<212> DNA

<213> homo sapiens

<400> 570

```
caattccctt cattatcttt tgctgggccc aaggatattg aagccatcca ttgctttact    60
tgtcttccaa gttcatcagt gcctgcactg caaactcttg taacttctta tgctcctcta    120
ggttacactg aagcttttct agcaactcaa aatatcgga gagtgagtct ctgggccaaa    180
cacggtcatc ctgatccatt tccattagcc tgggcagatt ctctgcaca agagtttccc    240
agtcctaatg acctataggg aggaatgctt cagaaaagca tgtctagatt tgtaaaagct    300
gggtaagagc tggtaaatecc tatgggtgtg gtggaaaggt ggagtggaaa gaggtaacag    360
gaagcaagga gggaaagggg gcatcagcaa gaaaccactt ttacaatga gcaaagaggc    420
cacggccaca cttacccaaa gcgaagaaga agtacagggg aaattaagaa gcaaaaagaa    480
agtaattaag accagaaaat tggaaaggag atatagtagg agagctcctg ttaagactaa    540
gatg                                                                    544
```

<210> 571

<211> 513

<212> DNA

<213> homo sapiens

<400> 571

```
ctcagctgct gtcttgggat tgatacggag aatagtcacc agacgacggg gctgagagag    60
ggatgcattt ggggtggcag aatgactcct gattttatgc atttttataa gctgaataag    120
aatggaagga aaactaaagg aagcttcaac tccacgagat ggttttatgg gtgctttaga    180
gcctttaaaa ataataagaa taaaatcag ctgtctccga atattaaagg tgtctctctg    240
gttccgaaag gtcagccacc ctggcttcca aatcaaagcc aacggccagg tgcccacaca    300
ggcccgtgcc ttgagcctcc tgccaaaagg tttcttagtg tgtttttatg tctccctgac    360
atggaagcag cagggatggt tccccagccc ctaaaacctc tgcacattgt gtcaccacgc    420
agagggatgat gattcaggag gagtcagaaa taaagaaagg aaggagtgtg cagccctcgc    480
catggaaagc cacacagccg ttcacatctg ggt                                                                    513
```

<210> 572

<211> 79

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (19) .. (79)

<223> n=unknown

<400> 572

atatgagatt tatcaaagna gnatcncaga agcaatccaa ttagcctatt tgtcaaataca 60

ttgcnatngn acnnaacgn 79

<210> 573

<211> 288

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (233) .. (233)

<223> n=unknown

<400> 573

gccagtcattg gcacagtggg gtgaaggaag agcagtttca ggcacccaaa acctgacccc 60

cacgacctgt tttccacctg aagagccacc cattccatcc aaacctttgg caaaagtctg 120

ctaacagaga gaaccggcca gtgtgctggc cagtcgcat catgcctgtc tttaccctct 180

aagctgaagc tgctcatcaa cggtagatg gcaaaaaggt ggggtccagaa gangggaaaa 240

gaagggagtc tgtgaaaaca aaatgctgaa gaatctgcat caaataaa 288

<210> 574

<211> 282

<212> DNA

<213> homo sapiens

<400> 574

```
agattcttca gcattttggt ttcacagact cccttctttt cccctcttct ggacccacct. 60
ttttgccatc tcaccgttga tgagcagctt cagcttagag ggtaaagaca ggcattgatcg 120
cgactggcca gcacactggc cggttctctc tgtagcaga cttttgcaa gggtttggat 180
ggaatgggtg gctcttcagg tggaaaacag gtcgtggggg tcaggttttg ggtgcctgaa 240
actgctcttc cttcactcca ctgtgccatg actggcctcg ag 282
```

<210> 575

<211> 360

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (288)..(303)

<223> n=unknown

<400> 575

```
tcctaatatg cctagattta aagctgattt aatttatgga aaaatcacc cttcagacttt 60
gcttttcttt ttctaatctc ctaatggtag tatgatatag catagtagaa ggagatttgg 120
cctgggagtt tggacaccaa agttctagct gcagctttgc ttccaatgtg accttgaaca 180
agtcctttta cctctgggct tcagatttat tgcttataaa gtgaagagat tggagtagtg 240
cctgaaattg catccagctt tagaacggac tcaatgacct tcttctantt gtacaaggct 300
aanatgcctg gaacagaatc cttctgcatt ggtcttgtag cacatttttc cctggggttg 360
```

<210> 576

<211> 338

<212> DNA

<213> homo sapiens

<400> 576  
tacaagaaca atgcagaagg attctgttcc aggcagtta gccttgtaga agtagaagaa 60  
ggtcattgag tccgttctaa agctggatgc aatttcaggc actactccaa tctcttctact 120  
ttataagcaa taaatctgaa gcccagaggt taaaggactt gttcaaggtc acattggaag 180  
caaagctgca gctagaactt tgggtgtccaa actcccaggc caaatctcct tctactatgc 240  
tatatcatat taccattagg agatttgaaa aagaaaagca aagtctgaag ggtgattttt 300  
ccataaatta aatcagcttt aaatctaggc atatttgg 338

<210> 577

<211> 359

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (112)..(356)

<223> n=unknown

<400> 577  
gggagttttc tgtttgtaac aggtgggagt ggaccagttt ccctgtagc ctgcaacaac 60  
aatcccaatg gttgaaagac ccccaaacca gcaggagag tggttctgtt tngacaaaaa 120  
agaaatagaa atatatactt gngtcagcaa tgcaagaccc cctgtngttg ccaggaatca 180  
gnatgcatat tattttctaac ataagttttt ctcagatgnt ttgcactttg ttgtccagtg 240  
tctttttaaa aatgntanac tataatttgc atatcttggg caagtttgta gatacaagaa 300  
gtgttttggg tataanctgt ggaccatgaa aaatgcaagt gcaatcttna tctganttg 359

<210> 578

<211> 267

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (162)..(249)

<223> n=unknown

<400> 578

```
aggttttact gtgaaaagca tgctcatcat acatcagcga actcataccg gagagaagcc      60
ctacacatgc agtgaatgtg ggaaaggctt ccccttgaag agtcggctga ttgtacatca    120
gcgaactcat actgggagag aaaccttaca ggtgcagtga antgtgggaa aagtttcatt    180
gtgaatagcg gactgatgtt acatcagcgg aactcatact gggagaggaa accgtacann    240
tgnaatgant gtggaaaaag ttttgcc                                     267
```

<210> 579

<211> 483

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (162)..(483)

<223> n=unknown

<400> 579

```
aaatgaaagg ttacccccaa tccacagact ctctctcaga tgagtaattt tctatacatt      60
ggtacatcaa agaattcaga gcctgaattc atgttgaagc ctttctgaca ttgatagcat    120
tcctcctagt gaataacact ggattttgaa atatgatttt tnatactcag tanacatgta    180
gaaaatctat actgtgaaat ctctgatgtt gtacaaggna gattttcttc ccaaaggcat    240
gaacatgtcc antgcattgt cagggtttgt ttccattatg agttegctga tgtacaatga    300
gatttcnctt tgaggagaag gcttttctac attcactgca taaaagggt ttctctcctg    360
tatgagttcg ntgatgaaca attagacggn tcttcatagt gaagccttta cnncattcat    420
tanatccata aggnnnttct ccagtatgan cttgnntatg taaagcaagc tctggctcct    480
ggn                                                         483
```

<210> 580  
 <211> 300  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (145)..(263)  
 <223> n=unknown

<400> 580  
 agccgccacc aagccaggtg tctgggggtct cagtgtcctg gatgactcca tctgcaagac 60  
 caaggcgagt ttctccaggg ccacgaggca gcgcctggct ccggcagctg ggcacgtcca 120  
 gggcagagggc tgtgcttctg gattngggcg tcttcacat gcccatccc aggcgtctcc 180  
 cccaggcctt ccttctggag agacacctta ttcgtncctg tctcttaaag cctcaagttt 240  
 gattgaagaa gcagaaagtt ggnatagaca cctttgagca ttcaagctct cgccgggcct 300

<210> 581  
 <211> 245  
 <212> DNA  
 <213> homo sapiens

<220>  
 <221> misc\_feature  
 <222> (73)..(232)  
 <223> n=unknown

<400> 581  
 aaacctcagc cccaaacact aaagtggcaa cagattggta gggagtcctg gtgcatggaa 60  
 gaagcaacag tanacctttg ggggaaatac ttttgaacac agaccctca ggattcctac 120  
 agattaagtt tagacagata agaacttaat caaaaattac caaacacatg ngaaaataaa 180  
 ccanttgact gacaggaaga nggttttnat gtggttagtn gggagaatag anaaggctgc 240



tgctt

245

<210> 582

<211> 564

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (411)..(491)

<223> n=unknown

<400> 582

ttagggaatc ttcgccacac taaaaattta atacagctaa atttgactat tttttttcaa	60
cttttgcat ttcagttttt ataaagatgg tctccttcat ccatagattg tcagtgtaat	120
ctcttagatt tcttccaaat atttccatga ctttaatttt taccctctaaa tttttaatcc	180
tgactcattt gaatttactc ctgaatatga tgtaagagaa gagtccaatt taagttccag	240
actaatggcc agttgtatga ataccattag taactaatga atttaaatac tcttattatc	300
acccccaaaa tatgcaaata tcatatatgc aaatatcata atttactagt agagtatggt	360
gcattgatct acttattttat tacatgctca actcatttta atttgattat nggtggcttta	420
taacatgttt ggtaagatat attttataat tttctttgtn atttgttatt ttcagacatt	480
tctttnttt ntaaatagta gaagcagcag ccttctctat tctccccact aaccacatca	540
aaaccctctt cctgtcagtc aagt	564

<210> 583

<211> 353

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (274)..(341)

<223> n=unknown

<400> 583

```
gaaattagta agggagggcc gagaagacac ggctgctcag aagctgttcg ctgtttgagg      60
gatttcccg agagcctgtt aaaagatgcg aagtgggtggg tgtaccgctc agccaccttt      120
aaaccggctc tgtgcgttct ggctctggaa agcaagtctc caggcatttg ggctcagaat      180
tgctggggccc cgagtttggg cgggggtggt ccttctgggg gtcaggcctt gagcagcttg      240
cactggtggc aggtttggga gcagttgagg ggcntnctgn tgtgncnttt tgaggggggnn      300
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<211> 537

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ccctggccct aaaacctccc tagggccacc accctgacct tggcagctca gacagatcct      180
attccaaccc cgcagccata tcctccctcg cagaccagg tcccctgaga agagggttaa      240
tcaatcaaga tgccactgca ctgccactct ttggagctac tggaaggggtg accagtttgc      300
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caagttccca gtttccttac tcctcagccc cagactgact gagggccaaag gccccggagc      420
agctgtcctg acgaattcca aggatatgag tccaccggct ccaggtctac ccctacccca      480
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<210> 585

<211> 432

<212> DNA

<213> homo sapiens

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<223> n=unknown

<220>

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<222> (427)..(427)

<223> n=unknown

<400> 585

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gcagacaccg tctctctcct cctcaagga cctctgagct tgcactccaa tctctctccc 180

acactcacct ttctcctttc tgttctcttt gggatccagg tttatttgag gagataggaa 240

aagctctga tccagcaggt tttattctta aatttgtaac aaagtaaatac acagaacctc 300

caccagcan caggcctctg gttctctccc tcttcccag gtataggccg gctttcagaa 360

accctgcacc acatagaccc tgggcctgaa ttgctgtgag tataatgact ctgctcgtaa 420

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<211> 397

<212> DNA

<213> homo sapiens

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<223> n=unknown

<400> 586

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atgtcctcat ttcaagggtt catttttggg ggaaaaaaaaaa ttcttcagga tgcaggatgc 180
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<210> 587

<211> 375

<212> DNA

<213> homo sapiens

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<223> n=unknown

<400> 587

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ccactgcaaa tactggctgg gcctggagat gacctgggtc ccattcactt cctagggtga 180
aggaggtcat cattaccacc cctgctttca gcnnnnnnnn nnnnnnnnnn nnnnacaaac 240
tggctgagct gcaaccctga gccggggaat tcagccactc cagacacagc ccctgccctc 300
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gaaagtgaga tggca 375
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 gccccgtcag ggcncgtgtc gtgctggaat catcattgtc ctcaactgca aaatggaaaa 180  
 taaaatgata gtggttcctc cctcccgggg ttgccaagat gattaaataa cataacaact 240  
 aagatgtatc cgcccccttc tcctctactt gcaaggcatc gatcccttca ttccctcgcaa 300  
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 tcangttcgg accctgaggt ctgaacactg cattaagctc tccagacaga atcaacttcg 480  
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<210> 589

<211> 308

<212> DNA

<213> homo sapiens

<400> 589

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tgagtaactg ggtagatgac agaaccattc cacactggat ttctattgtg tgattcccct 180

gttacattac tactgctgct ttcccgtctt ctccatgggc tatttttgcc tagaaccttt 240

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gtctctac 308

<210> 590

<211> 463

<212> DNA

<213> homo sapiens

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<220>

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<222> (414)..(442)

<223> n=unknown

<400> 590

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atggacacag taacgacttg ttcacaagac acaacaaaac ccatcaaaaa ggccatcact 180
ttaaccaacc tataatacca caatagaaaa tgattctgaa tcataatatg agcagcccca 240
ntaatncat ctttgtctta tcaatttatc aggtcatttt gagactgtag agttacactg 300
tcatagactt ttaagattcc atttccttag ttttatttca aattattatt aatgaatggg 360
gacaagtcac acgagctaaa aatactttta aactgagttc gtttttcata aganaaaaag 420
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<211> 408

<212> DNA

<213> homo sapiens

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<222> (307)..(399)

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gcattgggtc aggaaacagt aagcgtcaaa tcacagaaac gaaagctact cagaaattgc 180
ctggttagccg acatacattg aaacatggca ccttgaaagg attatcttct tcacttaata 240
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aggcctnttt gagtatggat gaggctgcnc agcaanngtg tacntagaag actcgnaaac 360
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<210> 592

<211> 560

<212> DNA

<213> homo sapiens

<400> 592

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tattccttct gtactcttga aacctatctc agaagtatct ttgacaaatt ataaatgtag    180
aagaatttaa gaagttaatt aaaattatth taatataatt tctcctttat ttttaataaca    240
aaataccagg gaaaaagttc catttattht cctcagtaat tggctgccct tgatgtgtca    300
aatccagctc ttgagggcgt gttacttht caatatccaa agagtccatg ctggaggctg    360
cggaagtgat gctggaatgg gaggaattac taatagagtg tacttcagca tcaactactg    420
tgctgtctga cgcggthctt ctgtgtgat tagttactaa gggthtagta tcttctagta    480
cagattgctg agcagcctca tccatactca aagaggcctg ttctaactgt gcagtgcagt    540
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<210> 593

<211> 311

<212> DNA

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<222> (60)..(60)

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<222> (293)..(304)

<223> n=unknown

<400> 593



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ccaccaaggg ggcagcgctg tgtacgcccg gctcctcgcc ctggacatgt gtgggggtctg	180
ccttgtcaac acccttgggg ccctgcccac catccactgc accctggcct gcaggccctg	240
gctgcgcccg gctgcacctg tgggctacac tgtgttgctg ggtgtggccg gcnggcgtgc	300
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<210> 594

<211> 396

<212> DNA

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<222> (59)..(373)

<223> n=unknown

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gnctgtttgt caggcgggan ctggnagcct gcacagggac agagctgggt tcatccggca	180
ctccctagcc ctggacaccc tcnttgtctc gcctgcctc ctgcaggnet tcaactctccc	240
ctgaggctgt nctggccccg actcncnga gcacctncan cccccggagc aggtgcacac	300
ccaggtaagc aggtccaggg gcttgggtng gcagggctag cttttggatc ctgantntca	360
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<210> 595

<211> 443

<212> DNA

<213> homo sapiens

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<222> (267)..(267)

<223> n=unknown

<220>

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<222> (378)..(440)

<223> n=unknown

<400> 595

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agagccaccg gccttcagcc ctggagctga aagtgtggct ggagctagag gtggcagaga 360
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<212> DNA

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<400> 596

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gtccgcctgt caagaagagg ccatcctggg cagcacatta ggggcaaagt gccagatgc 180
ccagctgagg gcaaacctcc atgcctggag gaggaggtcg cctctgggag caggaggacc 240
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gggagaagtc cctctccagt gaggcagagg agccagatt gcaaaccctg gtctctgcct 420
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ccatagttcc actgtgcccc ggactgggag cagtgtggga gtgctggctg gagtgtgctg 480  
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<211> 440

<212> DNA

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<222> (440)..(440)

<223> n=unknown

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 gagttcgagc agctgccctt cagccaccca ctgttcatca tgttctcatc gggcaccacg 180  
 ggcgcaccca agtgcattgt gcattccgct gggggcaccc tcatccagca tctgaaggag 240  
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 tggatgatgt ggaactggat ggtgtccctt ctggccacag gagcggccat ggtcttgtag 360  
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<211> 160

<212> DNA

<213> homo sapiens

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 gcaccaagag ttaaataaga gtagtgctgt taccagtgaag gaatggcgtc acttcagact 180  
 caagcaaaac tggttttaga ggaaaacaag ttgttgctgg agcagttgga gattcagcaa 240  
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gctttccttt gctgaatctc caactgctcc agcaacaact tgtnttcctc taaaancant 240  
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 tcttcgtgca actctccatt tcttcncta ctttcttgga ctgcaccta aacattctca 360  
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<211> 290

<212> DNA

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 tcctggtttc tgagagggac atcttcatcc ctactcccct tggccccaa ccacagtcct 180  
 ggtgaagatg tggatgataa tggcgcttg atttccaaat gaagacagct ttattgctta 240  
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<211> 375

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<212> DNA

<213> homo sapiens

<400> 604

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<210> 605

<211> 506

<212> DNA

<213> homo sapiens

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gcaatagagg cacggtggag aatgtaattt ttaaaacttt accatgtttt tttagagagc 180

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agcaaacgag gcctgtgttt attttgaagc tctccagaga ggcctacaac tttaccacgt	420
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<211> 392

<212> DNA

<213> homo sapiens

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<210> 607

<211> 542

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<213> homo sapiens

<400> 607

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<212> DNA

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<222> (124)..(234)

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<212> DNA

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<220>

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<222> (325)..(426)

<223> n=unknown

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 attttctaag aggatctttt gaaactcttt agtacaatat ttgagtaaaa taaattattg 180  
 tggatctttt gaaactctgt gtagtattcg agtaaaataa atatttgaca ttacagtag 240  
 ggtacaccct aagttgttta tgaattcctt ataccactgt tatatttaat ttttcagata 300  
 aaatatgtat gggaaaatga ctagnгааат tgattctttt ttaaggctca gggacaagat 360  
 taagtggact aattgtggaa cccaagctc ctaattgtaa ggtccagagg tggatggnct 420  
 cccatnaaa 429

<210> 611

<211> 407

<212> DNA

<213> homo sapiens

<400> 611  
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 taatctctga gatttctgac taaataagga gctaccctga aagtacatga catttgtaat 180  
 tttatggaga catcactctg aacatacaat tagagcttgg gggtcacaat tagtcactta 240  
 tcttgtccct gagcctaaaa aagaatcaat ttctctagtc attttcccat acatatttta 300  
 tctgaaaaat taaatataac agtgggtataa ggaattcata aacaacttag ggtgtaccct 360  
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<210> 612

<211> 279

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (7)..(10)

<223> n=unknown

<400> 612  
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 gcatccagtg ctcgatcagc atgtcggaac acgaggccaa ctcagagcgg tttgagatgg 180  
 agacccgggg agttaacat gtcgaggggg gctggcccaa ggacgtgaac cccctggagc 240  
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<210> 613

<211> 575

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (221)..(224)

<223> n=unknown

<220>

<221> misc\_feature

<222> (422)..(486)

<223> n=unknown

<400> 613  
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 attttcaaag tggacagact ttctgttcct gatttgtagg tggacgagga gggtcgatca 180  
 tggaggagaa acccttcccc actcctgaag gtcttcccga nntnctgcca tggccatgca 240  
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 aggctgactt ctaggctaag tcttcttcca cttcttcac cgccttcttc ccccgctgct 360  
 tcctctccct cctccaccac ctggtcttct tctggacttg gttgctgagg cactggcgct 420  
 antttatggc gtctgcctcc ttcttcttca gtctgtgaag atgatgtcga agaactcctc 480

ctcggnccttg ctgaccagcg cctccaggtc tacggccagt cctcatcggt ctgctcctca 540  
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<210> 614

<211> 229

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (3)..(194)

<223> n=unknown

<400> 614  
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 atatnccaaa gcctgggggt nctaaaaagg angatgtatt gcttgctctc accaagctta 180  
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<210> 615

<211> 354

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (325)..(341)

<223> n=unknown

<400> 615  
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aactccatat gcatttaaaa agtaaggaca ttttcttata caactatatg ccatcatcat	180
ctctaacaaa atcattaaca aattattgat accatctaac agccagtcta tgttcaaatt	240
tccctggtaa atttggttc ttaaccttat catcacataa aaaggggtct cctgttttta	300
aaaaagctat aagtatTTTT taacncnacc agaggcttna ngcagaattt tttt	354

<210> 616

<211> 540

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (489)..(533)

<223> n=unknown

<400> 616

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gaaagagatg gggatggagt ctgccctgag atcctccaat ttgacctctg gtcgcttctc	180
tgcctcatct ctgctccctt cccctgccag ctcagtgcc a cttttacctg gtacacagct	240
ccttctctca gacctgaag tagtcttcag cctccctacc cagaagatgg ccgtggaaaa	300
cacacaggaa gggccatttc acattgcaaa tgccctcatg aatccagcag gctggtagct	360
taacgtatac agttattagg ccgaaggagg atgcaggtgg gaagctgagg agggttgaat	420
gagtcacctta aggatacgta aattagaagc agaaacacag tagaattcag acccaagatt	480
aataatctnt gctcctgcat aaaggggaact ctcttgccaa atttacaggt agnaaaaaaa	540

<210> 617

<211> 417

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (46)..(46)

<223> n=unknown

<400> 617

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gctgggtacc caaagacttt tacacaagag agggtaaatt gtctaggggt ggagaagaaa      120
agttcctgaa actaaaacag aaaaatgtag gggtcgatag gactatgaaa gttggtatat      180
ttgaacactt catgtgaagt agttgcattt tttatctgat tttatcatgg gaatgaacat      240
tgtatctgtg tgggggactg ttttccctac ctggtactgt aaaagagaag gcatgtaaat      300
cgtcccttca agcaatatta tttggacatg ctaagctgga accagggaga ctgcccaggc      360
ccacacagtg cagagtagaa gctacgggtg tggtaggaca aatctccact tgataac         417
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<210> 618

<211> 575

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (475)..(566)

<223> n=unknown

<400> 618

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gtcagtgtct attcctatca agaattccta ttccatttgt agtccccag ggctgccagc      120
atcagtctca cttgccagct atgttcaggg ccttcccacc aggaaatctt tcccatagcc      180
agtttctgtc tctcttactg agaaacagaa cagttcttcc tagcattttg tgccttggaa      240
ttgccatcca taaaccaaga agctcttggt tggtcagttg aaagttgttt atttggcact      300
gtagaatcca gcagtttctc acacagttcc agagtcagtc ctaggggaaa agaaattctc      360
tgcatgcctt gagtagcatg atcctctata aaccatttcc attgtgtcat ggaactcttc      420
tgggcactgc catccccatt agaatgttcc tctgacatca tctgagacag catgnntatt      480
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tcaggtatca gtggggtggc ttcagtaa atgttcattgc gagtcagtaa atgccctttc 540  
angtggaat ttctctaagt ccaaangtcc cagtg 575

<210> 619

<211> 456

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (271)..(271)

<223> n=unknown

<400> 619  
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caatatcttg tgttgtagaa gggcttttca aaatagaaaa gcacttctat agacttcctc 120  
ttacctattg tcacaaaata ggcaaggcaa ttgtttatta tgaacctcag aaagctggaa 180  
tttgagaaa gtcagtgact gaaggtaaga cagtagtggt tggaggagtt cggaattgca 240  
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taagctcaag tgtcattctt tacatctcct tctgttttct gtttatgcat gtcacaaaca 360  
tataactatg tgataagatt ttgatcgctc cagacagctt cacttctcac acagcaagag 420  
cattgctata ccgacccctt tggctgactc cccatc 456

<210> 620

<211> 409

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (314)..(314)

<223> n=unknown

<400> 620  
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tgtgaattct aatcagggtca cagggcatca agaggggtct ttaactcttt gggaacataa 180  
agtacacttt ttaaataaaaa ttataacttt tcctgggggtg actttgtcat gggtaaattt 240  
gggccaaggt taatgggttt agaggttgaa ttacttatgt ttgttttatg taaagtaata 300  
tattagggca aganatttga atgaacaaaa taaacaaaag atatgggtct tatcttcaaa 360  
gcttgcatth tagttagaaa acaaaatctg cataatgaaa ttatataaa 409

<210> 621

<211> 503

<212> DNA

<213> homo sapiens

<400> 621  
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tgtgatttga tcaactcgtt atataatttc attatgcaga ttttgttttc taactaaaat 120  
gcaagctttg aagatagaga ccatatcttt tgtttatttt gttcattcaa atctcttgcc 180  
ctaatatatt actttacata aaacaaacat aagtaattca acctctaaaa ccattaacct 240  
tggcccaaat ttacccatga caaagtcacc ccaggaaaag ttataatttt atttaaaaag 300  
tgtactttat gttcccaaag agttaaagac ccctcttgat gccctgtgac ctgattagaa 360  
ttcacatgcc ttaccaaatt acaatggaaa cttccaatct tcctttaacc agtctgaacc 420  
tcaggaaaaa taatttcata tttctgtatt ttgatcattt ttaagtctct aatttccact 480  
ctgtttaaaa aaaaatactc gag 503

<210> 622

<211> 242

<212> DNA

<213> homo sapiens

<220>



<221> misc\_feature

<222> (10)..(76)

<223> n=unknown

<220>

<221> misc\_feature

<222> (184)..(218)

<223> n=unknown

<400> 622

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tgtgggcant gattgngttc tattaagtcg ccaagtctcc agtacctaac accatggcat 120

ggcttccagg tggcactcaa caaatgtagg ttgaatgatg acccggtttg agagtacca 180

ggtnaagaag tttgggtttt atnttacagg taattgnnac cactggaaaa gttttgatca 240

gg 242

<210> 623

<211> 399

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (255)..(255)

<223> n=unknown

<400> 623

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cttctgtgac ctatatcctt ggatgctctg acttaattct aaaatagcca gttgacacag 120

cccttcaatc tggcaaacct accattgctt aatagaaatt aataggccaa ttttgattca 180

agaaatacta tgtaaagacc agtattttca gttaactttg aaagaaaatt ttactatatt 240

tgaaaaatat aagcnaagca tatttccaaa gacaaagggt ctggtgggtt ggaaagggaa 300

gaaacaattt gcaaaatcac actctagtat atgaaaagac tgcagatttt agtctactaa 360  
aatcctcaat atatttagca aatccccaat acagttttg 399

<210> 624

<211> 374

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (363)..(363)

<223> n=unknown

<400> 624  
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tgcaaaagtt ctgagctcct tttccagtga tatcagaacc aaacttaatt agtccatgca 120  
aattttgagg aggggaagac tttgagcagt tgcttagctc tgggatctgt cctggtaaaa 180  
gccaccaagc ctgccatggt tgggtttgct gacgatattg ggtcagccat attgttacag 240  
ctgcttttct gaccctgtgt aatctgtcct cttgtagaag tggggcagcg tgagcaatcc 300  
actcttctc ccgctgatcc caccacagtc ttaagggttc aacgccatag tcctcaccta 360  
cgnacgagta gaga 374

<210> 625

<211> 381

<212> DNA

<213> homo sapiens

<400> 625  
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tgagatctgt tttcctaagg ctgatagcct ttgatcctgt tgattcctaa gccctcaaac 120  
acttgtggct acagagtatg ccagggttg gagttaaatg ggccacccta gaacaagaat 180  
gagatgactg agaaaaatgg aggcattgct tctcagaaat ggtattgcta ttgacaaagc 240  
aggaaaattt atttaaaaca aaggatgtga ataatttggc catccaaaat tgatccagct 300

gagagaggca ctaaggcttc ttaccttctg gagggttttt attctaatta ttccagacga 360  
caagtagttt ggatagactg g 381

<210> 626

<211> 256

<212> DNA

<213> homo sapiens

<400> 626  
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gggccgcaga agaggtattg cagacggtgg accattataa gactgagata gagaggctaa 120  
ccaaggagct caggagacc acccagcaga agatccaggc tgccgagtag gggctggtgg 180  
tgctggagga gaagctgacc ctcaaacagc agtatgatga actggaggct gaggtagaca 240  
gcctcaaaca ggagct 256

<210> 627

<211> 322

<212> DNA

<213> homo sapiens

<400> 627  
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accaggga gattacagta aaataaaatt ttaggtcaga acaactgctg tcaagggtta 120  
agttcaacta gacagacaat ttagccctgc ccaaacagg gtgactgaaa ggatggctga 180  
gtgatgttcc tgaaggaatg acatggtgtc tgccttggtg gaggattgtg ttatcccaca 240  
taggaaccag acatgagaga aagcaaaaact atgtgtcttg atgagactca cctgggtgaga 300  
ggtactgagc tagtcttcag at 322

<210> 628

<211> 92

<212> DNA

<213> homo sapiens

<400> 628  
ctggaaaatg agaatgacca cccaccatac aggattatgt ggattaaaca agctcttgag 60  
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<210> 629

<211> 449

<212> DNA

<213> homo sapiens

<400> 629  
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ccgggcctgg actccttggtg gcttggggaac agacctgtga aagctccac atctcctcgc 120  
cagtcatac caactagtca ccaccaacaa ggagatggcg cagcccgtgc ctaatacag 180  
caattaactg ttagggtctt tgtgcaggaa gcacacgata tgctgagaaa aaccagcttt 240  
tgtctaagca tgcacctcta tggactaagt tgggtctaag cccagtcac atgcagactg 300  
ggaagatgtc tgctaggtaa gtgttgaggg caggteccac actgactgac tgtggcagac 360  
ttggcaacag cagctgtcac ccacagcagt ggcaattccc cgcacctccc ccccgaaac 420  
taggacatgt ttggcgatgt ctggagaca 449

<210> 630

<211> 234

<212> DNA

<213> homo sapiens

<400> 630  
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ttctctgagt aatgagaagc acccttgagt caccaaggca ctggcatatc aaaaagcggg 180  
gccgctgtcc atatcttgac gattgtagac acagttgtag ctgtatagag atga 234

<210> 631

<211> 296

<212> DNA

<213> homo sapiens

<220>

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<222> (22)..(288)

<223> n=unknown

<400> 631

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tnatatcctg ctggtccatt tcatctttt tcagataatg attctgtctt ccagncatc	120
cccacaatga gatnagcata ctctcaaaga tctcggccaa gtcattaata annannctga	180
acagancagg ccaaaggngg ncatnncann nttgcngggg gattcngncc anagcagngn	240
ancctaaggc agccagagtc cnncgagagc cagttnggt gacctggnag ccagaa	296

<210> 632

<211> 396

<212> DNA

<213> homo sapiens

<400> 632

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atattggtga aatgccactc attccttttt ctgaggagca aatcttgagt agcaatggga	180
agaaagcctg gcaacagcca ccatttgtct tgtggacctg acatgcttat tcacctagaa	240
aaagaagaaa ttgctaaatg cacactgata cctcttaggt aaccacaggt tttcattttg	300
tgctgaatta ttagtcattt ttcctttatg ttttttagagt atgattcaga gaccaattta	360
ttcccaaaga aaattgccat tacatctact aggttt	396

<210> 633

<211> 321

<212> DNA

<213> homo sapiens

<400> 633

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gcatttagca atttcttctt tttctaggtg aataagcatg tcagggtccac aagacaaatg 180
gtggctggtg ccaggctttc ttccattgac tactcaagat ttgctcctca gaaaaaggaa 240
tgagtggcat ttcaccaata tggaaatggt tccaatagag tataaaaatc cattaagcaa 300
ttttccagta cattaggcta a 321
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<210> 634

<211> 398

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (378)..(392)

<223> n=unknown

<400> 634

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cccgcggctc tctctctgtc ggtcctgcag ttcttttgtc cccgggtaga gggatcttct 120
gcagaaatag cgctggaagc tagagtgagg cctgagtact gccttggcct aggatggcta 180
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agggctcccg cgagcgcttc cgaggcttcc gctaccgga ggctgcaggc ccccgcgag 360
cgctgagtcg gctccganag ctctgccgac antggctg 398
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<210> 635

<211> 492

<212> DNA

<213> homo sapiens

<400> 635

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gattacaatc tctagtttat ggagtttggg ggacccaaac aacatcacag tacgtgaaat 60
cacctaacat ggcttggcat acgatatgta tgcaggtttc cttccagaca tttatagtta 120
ttataaaatt acagttttca agttactttc tcatgtgcag ctcagaattt cccacatcct 180
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aacagacca agtcaagaac cctggtatcc agtcacccat ttagaaggct ctggccacac 300
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aaaacagga agaacatgga ggtaaaagtc ggcccatttt ctaccagagg ttcataacca 420
gtggtccatg aactccttcc cacgtagtcc atgaacttga acagggcaaa gctaattctta 480
tttttaacta gt 492
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<210> 636

<211> 375

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (102)..(102)

<223> n=unknown

<220>

<221> misc\_feature

<222> (213)..(213)

<223> n=unknown

<400> 636

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aatatgtata ttcttacttt tcttctaatt ggcatatgta tccttgtgga cactttgaga 180
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gaggtttctt ggactctccc atttatagaa tcnttatact cttttactgt gtgggtccct	240
gcttttaaca gatttctgag gcaaataatat tgtgcttttt cttatgtagg aagaccagcg	300
aaaatagtta ctgagttgtc aattttatca gtagataaga aactttcttt attacagttc	360
agggaagatt ttcca	375

<210> 637

<211> 308

<212> DNA

<213> homo sapiens

<220>

<221> misc\_feature

<222> (67)..(184)

<223> n=unknown

<220>

<221> misc\_feature

<222> (305)..(308)

<223> n=unknown

<400> 637	
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gcacaagcca ntgatattct ctatgtgatc aggtttttac aaaaaaatac atagttttca	180
atanataatg cttaatttta caactttgat acagcaatgt catacacctg ttcaacacac	240
tacactctgc atgctagata gtctacgaga agacgaaact ttgccatgca ttttctttcc	300
cccnagn	308

<210> 638

<211> 429

<212> DNA

<213> homo sapiens